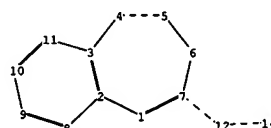
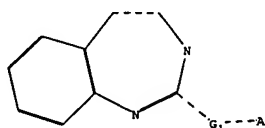


10019683



ring nodes :

1 2 3 4 5 6 7 8 9 10 11

ring/chain nodes :

12 14

ring/chain bonds :

7-12 12-14

ring bonds :

1-2 1-7 2-3 2-8 3-4 3-11 4-5 5-6 6-7 8-9 9-10 10-11

exact/norm bonds :

1-2 1-7 3-4 4-5 5-6 6-7 7-12 12-14

normalized bonds :

2-3 2-8 3-11 8-9 9-10 10-11

G1:O,S,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS  
14:CLASS

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=> d his

(FILE 'HOME' ENTERED AT 16:27:24 ON 29 AUG 2006)

FILE 'REGISTRY' ENTERED AT 16:27:34 ON 29 AUG 2006

L1 STRUCTURE UPLOADED

L2 11 S L1

L3 STRUCTURE UPLOADED

L4 3 S L3

L5 2192 S L1 SSS FUL

L6 775 S L3 SUB=L5 FUL

FILE 'CAPLUS' ENTERED AT 16:37:14 ON 29 AUG 2006

L7 56 S L6

L8 53 S L7 NOT (2006/SO OR 2005/SO OR 2004/SO OR 2003/SO OR 2002/SO O

FILE 'REGISTRY' ENTERED AT 16:38:45 ON 29 AUG 2006

L9 STRUCTURE UPLOADED

L10 3 S L9

L11 800 S L9 SSS FUL

FILE 'CAPLUS' ENTERED AT 16:39:21 ON 29 AUG 2006

L12 59 S L11

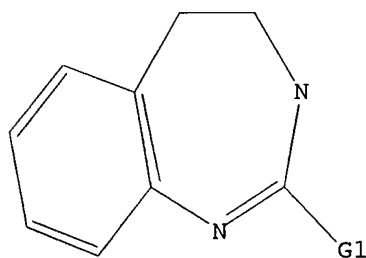
L13 3 S L7 NOT L8

L14 56 S L12 NOT L13

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 O,S,N

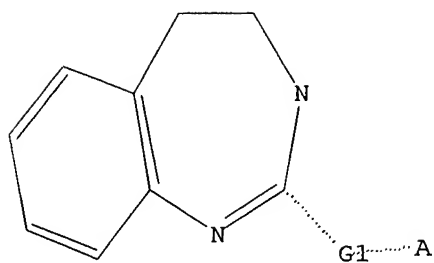
Structure attributes must be viewed using STN Express query preparation.

=> d l3

L3 HAS NO ANSWERS

L3 STR

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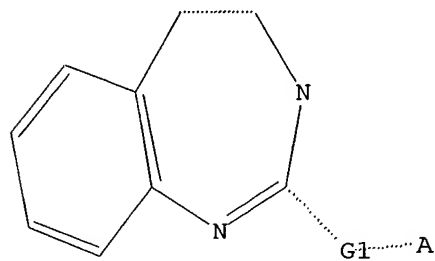
G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> d 19

L9 HAS NO ANSWERS

L9 STR



G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> d ibib abs hitstr total 114

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514 ANSWER 1 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:358147 CAPLUS

Correction of: 2005:481369

DOCUMENT NUMBER: 145:123919

Correction of: 143:26019

TITLE: Carbon dioxide, carbonyl sulfide, carbon disulfide, isocyanates, isothiocyanates, carbodiimides, and their selenium, tellurium, and phosphorus analogues

AUTHOR(S): Braverman, S.; Cherkinsky, M.; Birsa, M. L.

CORPORATE SOURCE: Dept. of Chemistry, Bar-Ilan University, Ramat-Gan, 52900, Israel

SOURCE: Science of Synthesis (2005), 18, 65-320

CODEN: SSCYJ9

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review of the application of carbon dioxide, carbonyl sulfide, carbon disulfide, isocyanates, isothiocyanates, carbodiimides, and their selenium, tellurium, and phosphorus analog to organic synthesis.

IT 199390-42-6P 199390-43-7P 199390-45-9P

199390-46-0P 199390-47-1P 199390-48-2P

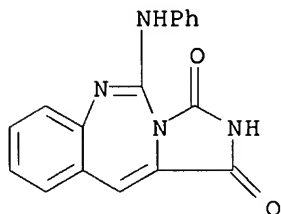
199390-49-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthetic applications of carbon dioxide, carbonyl sulfide, carbon disulfide, isocyanates, isothiocyanates, carbodiimides, and their selenium, tellurium, and phosphorus analogs)

RN 199390-42-6 CAPLUS

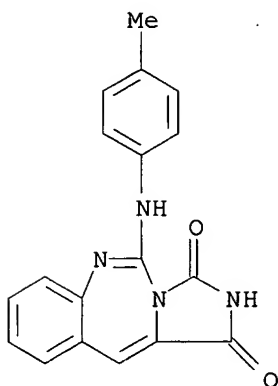
CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-(phenylamino)- (9CI)  
(CA INDEX NAME)



RN 199390-43-7 CAPLUS

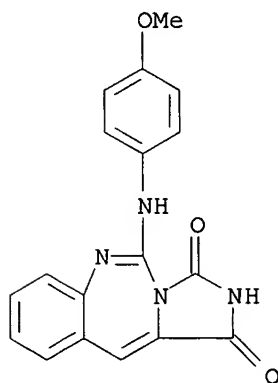
CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)





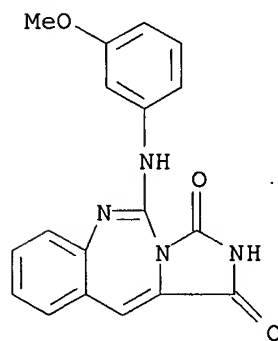
RN 199390-45-9 CAPLUS

CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(4-methoxyphenyl)amino]- (9CI) (CA INDEX NAME)



RN 199390-46-0 CAPLUS

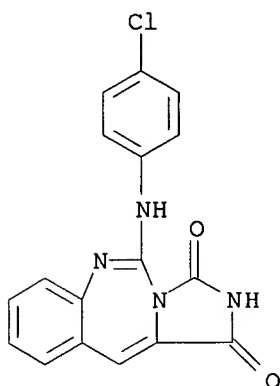
CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(3-methoxyphenyl)amino]- (9CI) (CA INDEX NAME)



RN 199390-47-1 CAPLUS

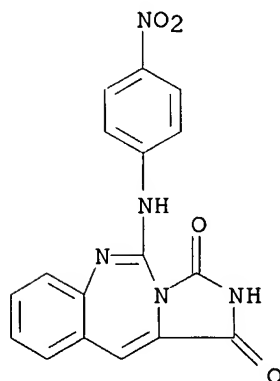
10/019,683

CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(4-chlorophenyl)amino]- (9CI) (CA INDEX NAME)



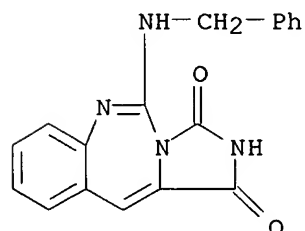
RN 199390-48-2 CAPLUS

CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(4-nitrophenyl)amino]- (9CI) (CA INDEX NAME)



RN 199390-49-3 CAPLUS

CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(phenylmethyl)amino]- (9CI) (CA INDEX NAME)



~~IN4~~ ANSWER 2 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

~~AC~~CESSION NUMBER: 2006:100738 CAPLUS

DOCUMENT NUMBER: 144:198849

TITLE: Novel dosage form comprising modified-release and immediate-release active ingredients

INVENTOR(S): Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar

PATENT ASSIGNEE(S): India

SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006024365	A1	20060202	US 2005-134633	20050519
IN 193042	A	20040626	IN 2002-MU697	20020805
US 2004096499	A1	20040520	US 2003-630446	20030729
PRIORITY APPLN. INFO.:			IN 2002-MU697	A 20020805
			IN 2002-MU699	A 20020805
			IN 2003-MU80	A 20030122
			IN 2003-MU82	A 20030122
			US 2003-630446	A2 20030729

AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form. Tablets containing 10 mg sodium pravastatin and 1000 mg niacin were prepared. The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

IT 120360-10-3, Batelapine maleate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(novel dosage form comprising modified-release and immediate-release active ingredients)

RN 120360-10-3 CAPLUS

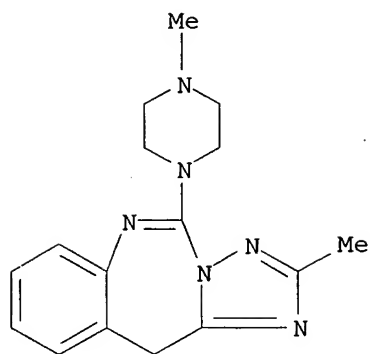
CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 95634-82-5

CMF C16 H20 N6

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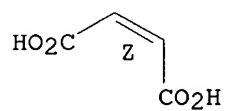


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



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144 ANSWER 3 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:837076 CAPLUS

DOCUMENT NUMBER: 139:337970

TITLE: Preparation of piperidine derivatives as CCR3 antagonists

INVENTOR(S): Matsumoto, Yoshiyuki; Imai, Minoru; Sawai, Yoshiyuki; Takeuchi, Susumu; Nakanishi, Akinobu; Minamizono, Kunio; Yokoyama, Tomonori

PATENT ASSIGNEE(S): Teijin Limited, Japan

SOURCE: PCT Int. Appl., 564 pp.

CODEN: PIXXD2

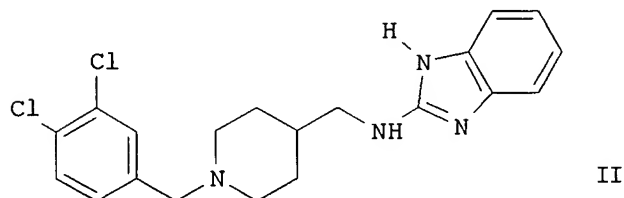
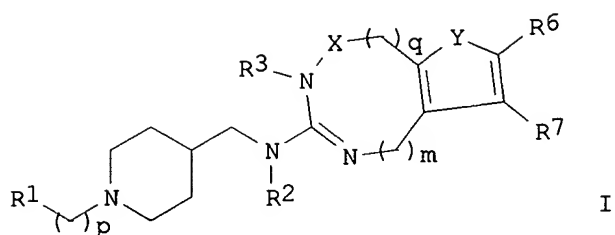
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003087089	A1	20031023	WO 2003-JP4841	20030416
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2484261	AA	20031023	CA 2003-2484261	20030416
AU 2003231359	A1	20031027	AU 2003-231359	20030416
EP 1502916	A1	20050202	EP 2003-725592	20030416
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1659161	A	20050824	CN 2003-813754	20030416
PRIORITY APPLN. INFO.:			JP 2002-113220	A 20020416
			JP 2002-240509	A 20020821
			WO 2003-JP4841	W 20030416
OTHER SOURCE(S):	MARPAT 139:337970			
GI				



AB The title piperidine derivs. having a benzimidazole subunit with general formula of I [wherein R1 = cycloalkyl, aromatic heterocyclyl, or (un)substituted Ph, etc.; p = 0-6; R2 and R3 = independently H, (un)substituted alkyl, or Ph; X = CO, SO2, CH2, CS, or a single bond; q = 0 or 1; m = 0 or 1; Y = S, -CR4=CR5-, or (un)substituted -NH-; R4-R7 = independently H, halo, OH, CN, NO2, CO2H, alkyl, cycloalkyl, alkenyl, alkoxy, alkylthio, alkylene, alkyleneoxy, alkylenedioxy, Ph, PhO, PhS, PhSO2, PhCH2, PhCH2O, PhCONH, CHO, alkanoyl(oxy), alkoxy-CO, (cyclo)alkanoylamino, alkenoylamino, alkyl-SO2, alkyl-SO2NH, alkoxy-CO-CH2, pyridyl-CO, morpholyl-CO, pyrrolidinyl-CO, piperazinyl-CO, ureido, thioureido, (un)substituted NH2, carbamoyl, or SO2NH, etc.] and pharmaceutically acceptable salts, or alkyl adducts thereof are prepared as chemokine receptor 3 (CCR3) antagonists. For example, the compound II was prepared in a multi-step synthesis. Some of compds. I showed >80% inhibitory activity at the concentration of 2  $\mu$ M against CCR3. I are useful for the treatment of diseases in which CCR3 participates such as asthma and allergic nephritis, etc. (no data).

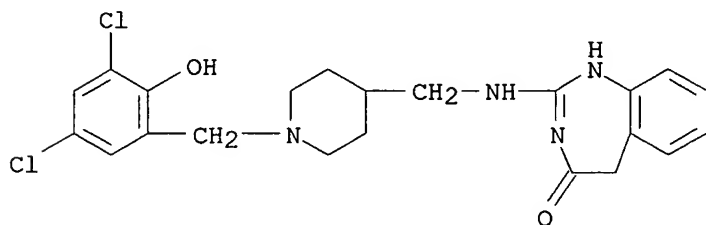
IT 616223-92-8P 616223-93-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of piperidine derivs. as CCR3 antagonists)

RN 616223-92-8 CAPLUS

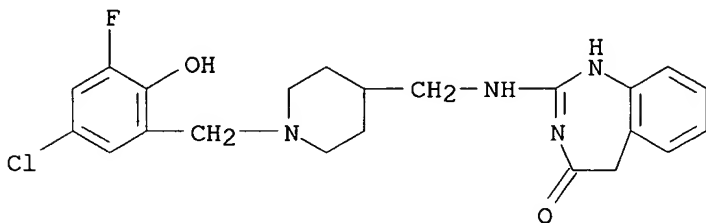
CN 4H-1,3-Benzodiazepin-4-one, 2-[[[1-[(3,5-dichloro-2-hydroxyphenyl)methyl]-4-piperidinyl)methyl]amino]-1,5-dihydro- (9CI) (CA INDEX NAME)



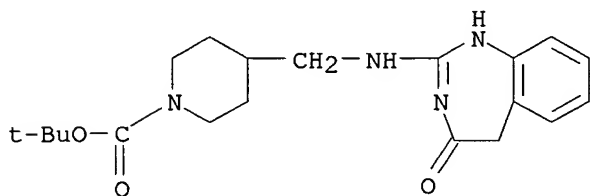
RN 616223-93-9 CAPLUS

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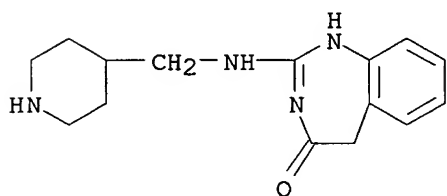
CN 4H-1,3-Benzodiazepin-4-one, 2-[[[1-[(5-chloro-3-fluoro-2-hydroxyphenyl)methyl]-4-piperidinyl)methyl]amino]-1,5-dihydro- (9CI) (CA INDEX NAME)



IT 616225-01-5P 616225-02-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate; preparation of piperidine derivs. as CCR3 antagonists)  
RN 616225-01-5 CAPLUS  
CN 1-Piperidinecarboxylic acid, 4-[[[4,5-dihydro-4-oxo-1H-1,3-benzodiazepin-2-yl)amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 616225-02-6 CAPLUS  
CN 4H-1,3-Benzodiazepin-4-one, 1,5-dihydro-2-[(4-piperidinylmethyl)amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

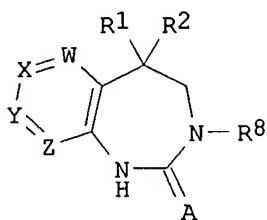
10/019,683

X L14 ANSWER 4 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

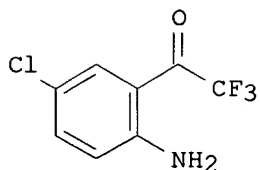
ACCESSION NUMBER: 2002:777651 CAPLUS  
DOCUMENT NUMBER: 137:294988  
TITLE: Cyanamide, alkoxyamino, and urea derivatives of  
1,3-benzodiazapines as HIV reverse transcriptase  
inhibitors  
INVENTOR(S): Bilder, Donna M.  
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA  
SOURCE: PCT Int. Appl., 117 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002078628	A2	20021010	WO 2002-US9456	20020327
WO 2002078628	A3	20030327		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003220327	A1	20031127	US 2002-108842	20020327
US 7015214	B2	20060321		
PRIORITY APPLN. INFO.:			US 2001-279217P	P 20010328
OTHER SOURCE(S):	MARPAT 137:294988			
GI				

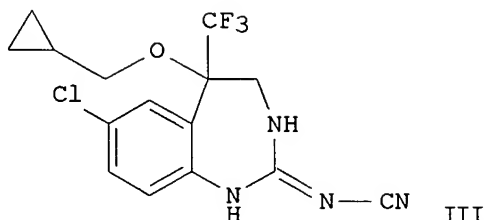




I



II



III

AB Title compds. I [A = NCN, NCONH, N-alkoxy; W = N, CR3; X = N, CR3a; Y = N, CR3b; Z = N, CR3c; provided that if two of W, X, Y, and Z are N, then the remaining are other than N; R1 = alkyl; R2 = R2c, OR2c, etc.; R2c = alk(en/yn)yl, cycloalkyl, Ph, etc.; R3 = H, alkyl, OH, alkoxy, OCF3, etc.; R3a = H, alkyl, OH, alkoxy, OCF3, F, Cl, Br, etc.; R3b = H, alkyl, OH, alkoxy, OCF3, F, Cl, Br, etc.; R3c = H, alkyl, OH, alkoxy, OCF3, F, Cl, Br, etc.; R8 = H, alkoxy, thioalkoxy, amino, alkyl, etc.] were prepared For instance, II was subjected to the following sequence: i. DMSO/THF, Me3SOI, NaH; ii. EtOH, NH3, 45°, 2 days; iii. IPA, diphenylcyanocarbonimide; iv. DMSO, NaH, BrCH2Pr-c to afford III. I are useful as inhibitors of HIV reverse transcriptase, and to pharmaceutical compns. and diagnostic kits comprising the same, and methods of using the same for treating viral infection or as an assay standard or reagent.

IT 467240-84-2P 467240-94-4P 467240-96-6P,  
7-Chloro-2-cyanoimino-5-(cyclopropylmethoxy)-1,5-dihydro-3-ethyl-5-trifluoromethyl-1,3-benzodiazepine 467241-02-7P  
467241-12-9P, 7-Chloro-5-cyclopropylmethoxy-1,5-dihydro-3-ethyl-2-methoxyimino-5-trifluoromethyl-1,3-benzodiazepine 467241-13-0P  
467241-14-1P 467241-15-2P 467241-16-3P  
467241-17-4P 467241-18-5P 467241-19-6P  
467241-20-9P 467241-21-0P 467241-22-1P

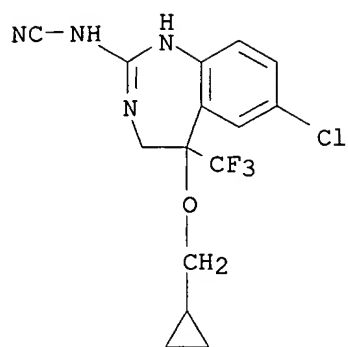
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(HIV reverse transcriptase inhibitor; cyanamide, alkoxyamino, and urea derivs. of 1,3-benzodiazepines as HIV reverse transcriptase inhibitors)

RN 467240-84-2 CAPLUS

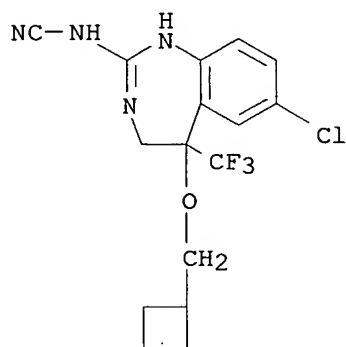
CN Cyanamide, [7-chloro-5-(cyclopropylmethoxy)-4,5-dihydro-5-(trifluoromethyl)-1H-1,3-benzodiazepin-2-yl]- (9CI) (CA INDEX NAME)

10/019,683



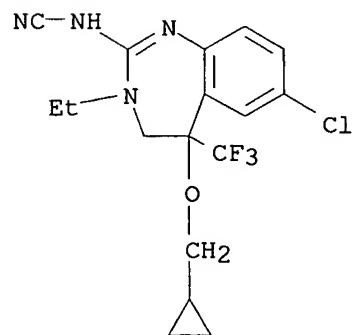
RN 467240-94-4 CAPLUS

CN Cyanamide, [7-chloro-5-(cyclobutylmethoxy)-4,5-dihydro-5-(trifluoromethyl)-1H-1,3-benzodiazepin-2-yl]- (9CI) (CA INDEX NAME)



RN 467240-96-6 CAPLUS

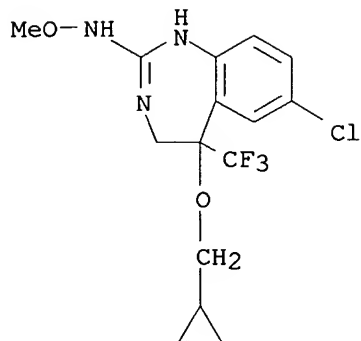
CN Cyanamide, [7-chloro-5-(cyclopropylmethoxy)-3-ethyl-4,5-dihydro-5-(trifluoromethyl)-3H-1,3-benzodiazepin-2-yl]- (9CI) (CA INDEX NAME)



RN 467241-02-7 CAPLUS

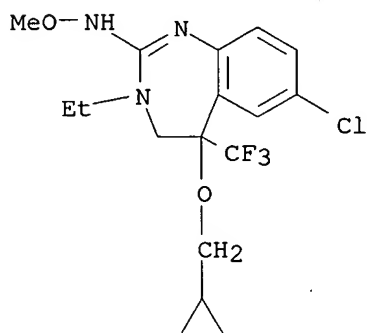
CN 2H-1,3-Benzodiazepin-2-one, 7-chloro-5-(cyclopropylmethoxy)-1,3,4,5-tetrahydro-5-(trifluoromethyl)-, O-methyloxime (9CI) (CA INDEX NAME)

10/019,683



RN 467241-12-9 CAPLUS

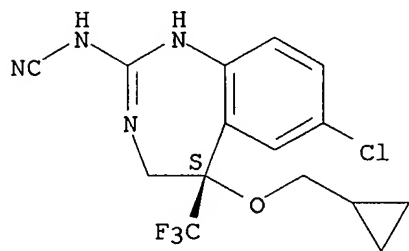
CN 2H-1,3-Benzodiazepin-2-one, 7-chloro-5-(cyclopropylmethoxy)-3-ethyl-1,3,4,5-tetrahydro-5-(trifluoromethyl)-, O-methyloxime (9CI) (CA INDEX NAME)



RN 467241-13-0 CAPLUS

CN Cyanamide, [(5S)-7-chloro-5-(cyclopropylmethoxy)-4,5-dihydro-5-(trifluoromethyl)-1H-1,3-benzodiazepin-2-yl]- (9CI) (CA INDEX NAME)

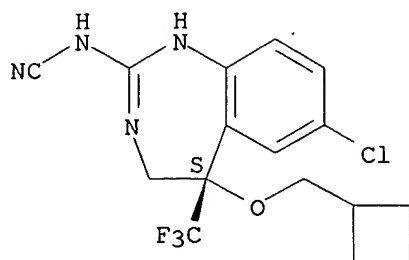
Absolute stereochemistry.



RN 467241-14-1 CAPLUS

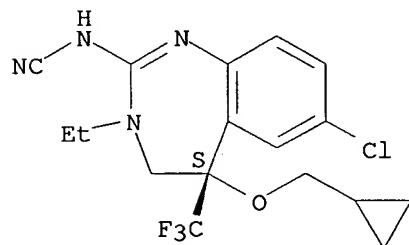
CN Cyanamide, [(5S)-7-chloro-5-(cyclobutylmethoxy)-4,5-dihydro-5-(trifluoromethyl)-1H-1,3-benzodiazepin-2-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



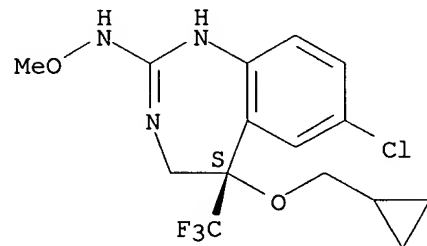
RN 467241-15-2 CAPLUS  
 CN Cyanamide, [7-chloro-5-(cyclopropylmethoxy)-3-ethyl-4,5-dihydro-5-(trifluoromethyl)-3H-1,3-benzodiazepin-2-yl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



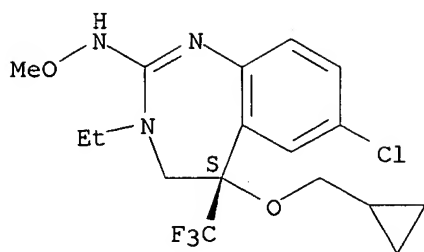
RN 467241-16-3 CAPLUS  
 CN 2H-1,3-Benzodiazepin-2-one, 7-chloro-5-(cyclopropylmethoxy)-1,3,4,5-tetrahydro-5-(trifluoromethyl)-, O-methyloxime, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 467241-17-4 CAPLUS  
 CN 2H-1,3-Benzodiazepin-2-one, 7-chloro-5-(cyclopropylmethoxy)-3-ethyl-1,3,4,5-tetrahydro-5-(trifluoromethyl)-, O-methyloxime, (5S)- (9CI) (CA INDEX NAME)

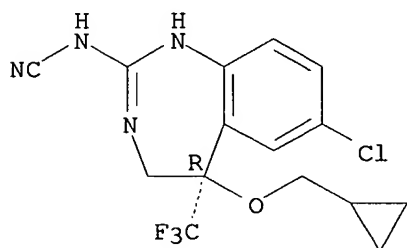
Absolute stereochemistry.



RN 467241-18-5 CAPLUS

CN Cyanamide, [(5R)-7-chloro-5-(cyclopropylmethoxy)-4,5-dihydro-5-(trifluoromethyl)-1H-1,3-benzodiazepin-2-yl]- (9CI) (CA INDEX NAME)

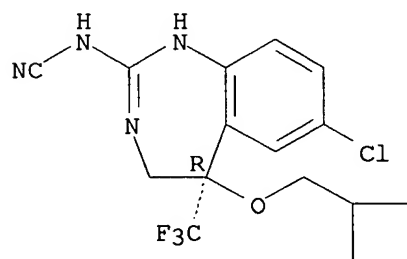
Absolute stereochemistry.



RN 467241-19-6 CAPLUS

CN Cyanamide, [(5R)-7-chloro-5-(cyclobutylmethoxy)-4,5-dihydro-5-(trifluoromethyl)-1H-1,3-benzodiazepin-2-yl]- (9CI) (CA INDEX NAME)

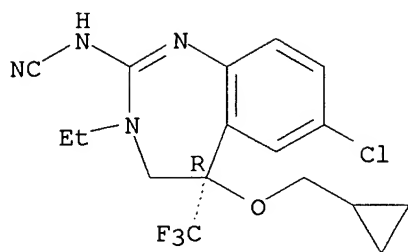
Absolute stereochemistry.



RN 467241-20-9 CAPLUS

CN Cyanamide, [7-chloro-5-(cyclopropylmethoxy)-3-ethyl-4,5-dihydro-5-(trifluoromethyl)-3H-1,3-benzodiazepin-2-yl]-, (5R)- (9CI) (CA INDEX NAME)

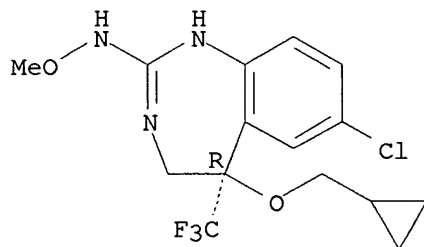
Absolute stereochemistry.



RN 467241-21-0 CAPLUS

CN 2H-1,3-Benzodiazepin-2-one, 7-chloro-5-(cyclopropylmethoxy)-1,3,4,5-tetrahydro-5-(trifluoromethyl)-, O-methyloxime, (5R)- (9CI) (CA INDEX NAME)

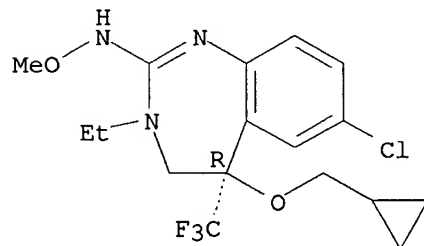
Absolute stereochemistry.



RN 467241-22-1 CAPLUS

CN 2H-1,3-Benzodiazepin-2-one, 7-chloro-5-(cyclopropylmethoxy)-3-ethyl-1,3,4,5-tetrahydro-5-(trifluoromethyl)-, O-methyloxime, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 467240-92-2P 467241-11-8P

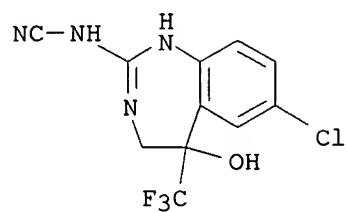
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; cyanamide, alkoxyamino, and urea derivs. of 1,3-benzodiazepines as HIV reverse transcriptase inhibitors)

RN 467240-92-2 CAPLUS

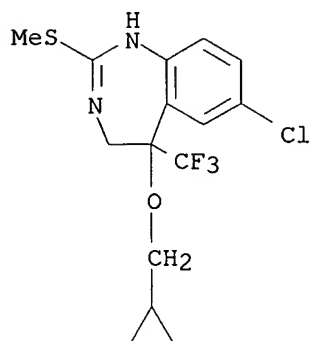
CN Cyanamide, [7-chloro-4,5-dihydro-5-hydroxy-5-(trifluoromethyl)-1H-1,3-benzodiazepin-2-yl]- (9CI) (CA INDEX NAME)

10/019,683



RN 467241-11-8 CAPLUS

CN 1H-1,3-Benzodiazepine, 7-chloro-5-(cyclopropylmethoxy)-4,5-dihydro-2-(methylthio)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



10/019,683

L14 ANSWER 5 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:31477 CAPLUS

DOCUMENT NUMBER: 134:100893

TITLE: Preparation of dihydrobenzodiazepines and their use for treating dyslipidemia

INVENTOR(S): Berthelon, Jean-Jacques; Guerrier, Daniel; Brunet, Michel; Zeiller, Jean-Jacques; Contard, Francis; Ausseil, Frederic

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

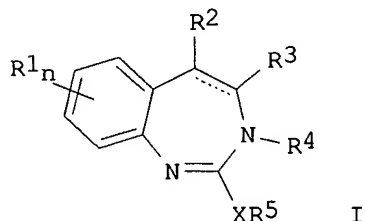
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002373	A1	20010111	WO 2000-EP6230	20000704
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, MD				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2796070	A1	20010112	FR 1999-8714	19990706
FR 2796070	B1	20030221		
CA 2378165	AA	20010111	CA 2000-2378165	20000704
BR 2000012169	A	20020319	BR 2000-12169	20000704
EP 1189890	A1	20020327	EP 2000-945864	20000704
EP 1189890	B1	20060419		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY				
JP 2003503483	T2	20030128	JP 2001-507812	20000704
AU 767016	B2	20031030	AU 2000-59814	20000704
RU 2247115	C2	20050227	RU 2002-102248	20000704
AT 323685	E	20060515	AT 2000-945864	20000704
NO 2002000031	A	20020305	NO 2002-31	20020104
ZA 2002001008	A	20030609	ZA 2002-1008	20020205
PRIORITY APPLN. INFO.:			FR 1999-8714	A 19990706
			WO 2000-EP6230	W 20000704

OTHER SOURCE(S): MARPAT 134:100893

GI



AB Benzodiazepines I [R1 = alkyl, alkoxy, halo, NO2, etc.; n = 0-4; R2, R3 =



H, alkyl, aryl, heteroaryl, etc.; R4 = H, alkyl, aryl, OH, etc.; X = S, O, NT and T = H, alkyl, aryl, etc.; R5 = alkyl, hydroxyalkyl, arylalkyl, etc.], useful for treating dyslipidemia, were prepared E.g., 3-(biphenyl-3-yl)-5,6-dihydrothiazolo[2,3-b]-1,3-benzodiazepine was prepared

IT 318529-44-1P 318529-45-2P 318529-46-3P  
 318529-47-4P 318529-48-5P 318529-49-6P  
 318529-50-9P 318529-51-0P 318529-52-1P  
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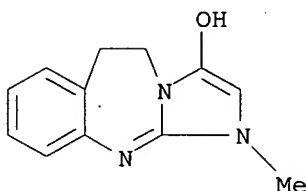
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 318531-33-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dihydrobenzodiazepines and their use for treating dyslipidemia)

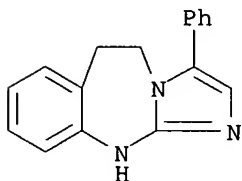
RN 318529-44-1 CAPLUS

CN 1H-Imidazo[2,1-b][1,3]benzodiazepin-3-ol, 5,6-dihydro-1-methyl- (9CI) (CA INDEX NAME)



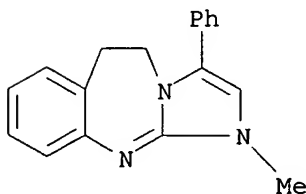
RN 318529-45-2 CAPLUS

CN 1H-Imidazo[2,1-b][1,3]benzodiazepine, 5,6-dihydro-3-phenyl- (9CI) (CA INDEX NAME)



RN 318529-46-3 CAPLUS

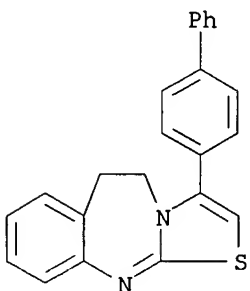
CN 1H-Imidazo[2,1-b][1,3]benzodiazepine, 5,6-dihydro-1-methyl-3-phenyl- (9CI) (CA INDEX NAME)



RN 318529-47-4 CAPLUS

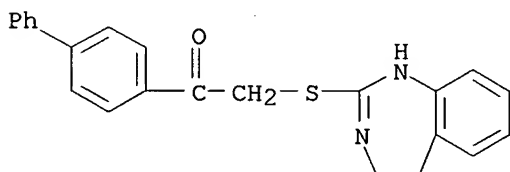
10/019,683

CN   Thiazolo[2,3-b][1,3]benzodiazepine, 3-[1,1'-biphenyl]-4-yl-5,6-dihydro-  
(9CI)   (CA INDEX NAME)



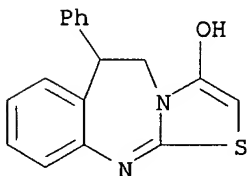
RN   318529-48-5   CAPLUS

CN   Ethanone, 1-[1,1'-biphenyl]-4-yl-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI)   (CA INDEX NAME)



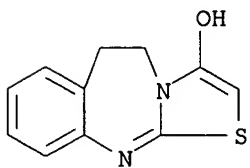
RN   318529-49-6   CAPLUS

CN   Thiazolo[2,3-b][1,3]benzodiazepin-3-ol, 5,6-dihydro-6-phenyl- (9CI)   (CA INDEX NAME)



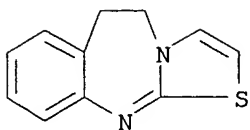
RN   318529-50-9   CAPLUS

CN   Thiazolo[2,3-b][1,3]benzodiazepin-3-ol, 5,6-dihydro- (9CI)   (CA INDEX NAME)

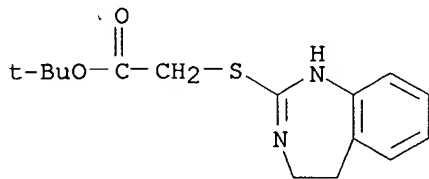


RN   318529-51-0   CAPLUS

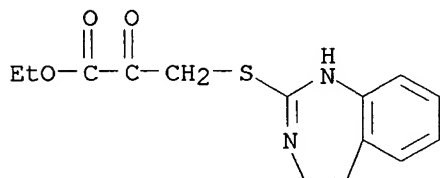
CN   Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro- (9CI)   (CA INDEX NAME)



RN 318529-52-1 CAPLUS  
 CN Acetic acid, [(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-,  
 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

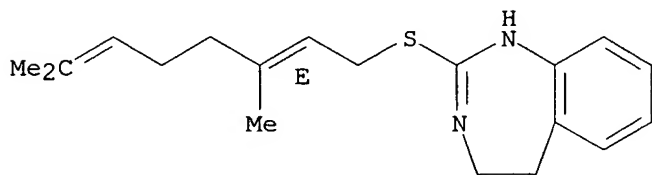


RN 318529-53-2 CAPLUS  
 CN Propanoic acid, 3-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-2-oxo-,  
 ethyl ester (9CI) (CA INDEX NAME)



RN 318529-54-3 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 2-[[ (2E)-3,7-dimethyl-2,6-octadienyl]thio]-4,5-  
 dihydro-, monohydrobromide (9CI) (CA INDEX NAME)

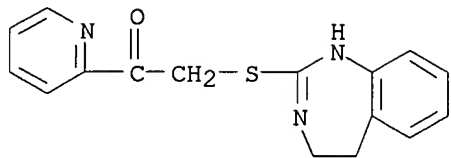
Double bond geometry as shown.



● HBr

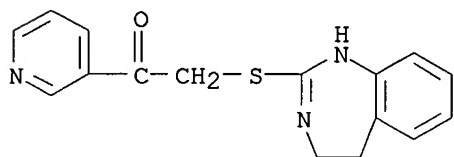
RN 318529-55-4 CAPLUS  
 CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(2-pyridinyl)-  
 (9CI) (CA INDEX NAME)

10/019,683



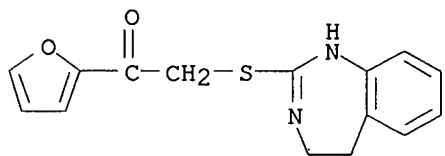
RN 318529-56-5 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(3-pyridinyl)-  
(9CI) (CA INDEX NAME)



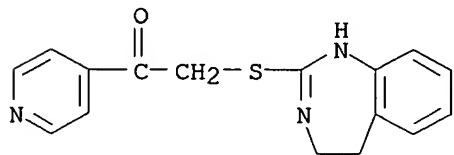
RN 318529-57-6 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(2-furanyl)-  
(9CI) (CA INDEX NAME)



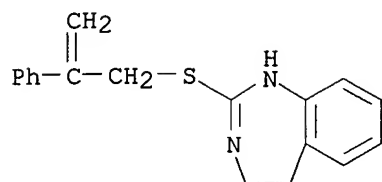
RN 318529-58-7 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(4-pyridinyl)-  
(9CI) (CA INDEX NAME)

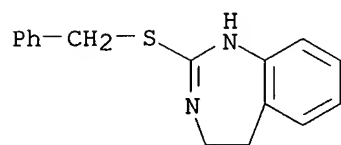


RN 318529-59-8 CAPLUS

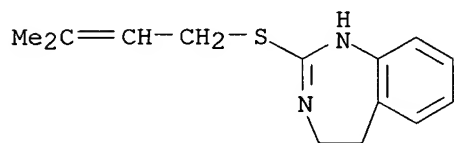
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-[(2-phenyl-2-propenyl)thio]- (9CI)  
(CA INDEX NAME)



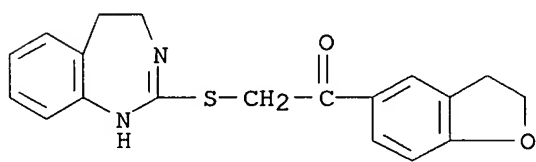
RN 318529-60-1 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-[(phenylmethyl)thio]- (9CI) (CA INDEX NAME)



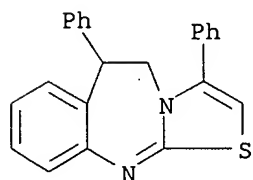
RN 318529-61-2 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-[(3-methyl-2-butenyl)thio]- (9CI) (CA INDEX NAME)



RN 318529-62-3 CAPLUS  
 CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(2,3-dihydro-5-benzofuranyl)- (9CI) (CA INDEX NAME)

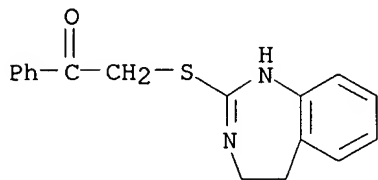


RN 318529-63-4 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3,6-diphenyl- (9CI) (CA INDEX NAME)



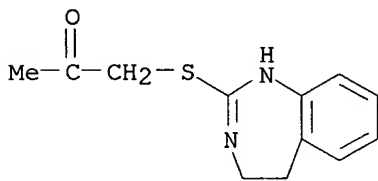
RN 318529-64-5 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-phenyl- (9CI)  
(CA INDEX NAME)



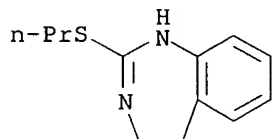
RN 318529-65-6 CAPLUS

CN 2-Propanone, 1-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA  
INDEX NAME)



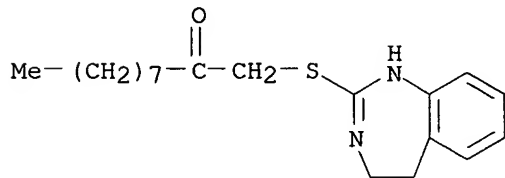
RN 318529-66-7 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(propylthio)- (9CI) (CA INDEX NAME)



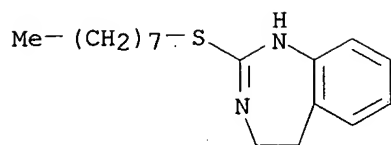
RN 318529-67-8 CAPLUS

CN 2-Decanone, 1-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA  
INDEX NAME)



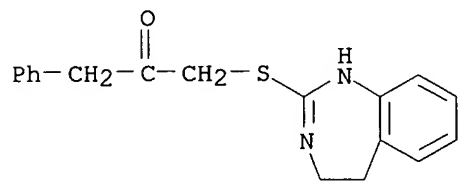
RN 318529-68-9 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(octylthio)- (9CI) (CA INDEX NAME)



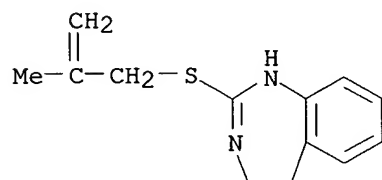
RN 318529-69-0 CAPLUS

CN 2-Propanone, 1-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-3-phenyl-  
(9CI) (CA INDEX NAME)



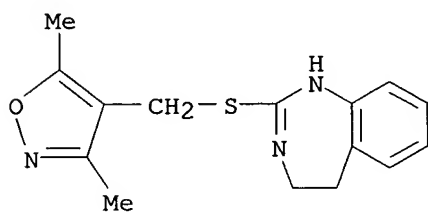
RN 318529-70-3 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-[(2-methyl-2-propenyl)thio]- (9CI)  
(CA INDEX NAME)



RN 318529-71-4 CAPLUS

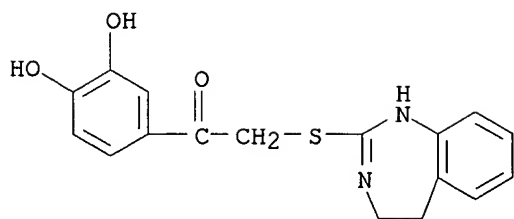
CN 1H-1,3-Benzodiazepine, 2-[[[(3,5-dimethyl-4-isoxazolyl)methyl]thio]-4,5-  
dihydro- (9CI) (CA INDEX NAME)



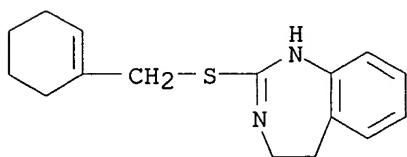
RN 318529-72-5 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(3,4-  
dihydroxyphenyl)- (9CI) (CA INDEX NAME)

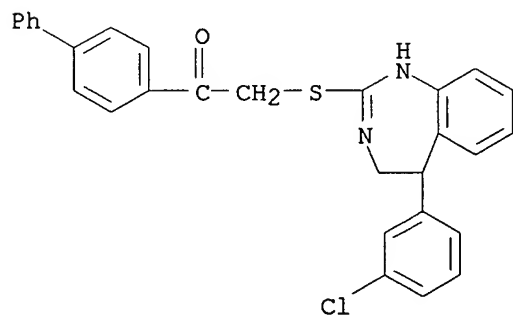




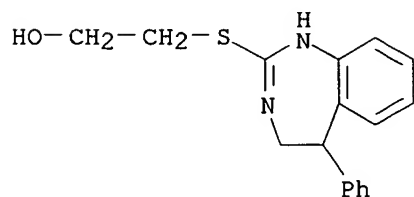
RN 318529-73-6 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 2-[(1-cyclohexen-1-ylmethyl)thio]-4,5-dihydro-  
 (9CI) (CA INDEX NAME)



RN 318529-74-7 CAPLUS  
 CN Ethanone, 1-[1,1'-biphenyl]-4-yl-2-[[5-(3-chlorophenyl)-4,5-dihydro-1H-1,3-benzodiazepin-2-yl]thio]- (9CI) (CA INDEX NAME)

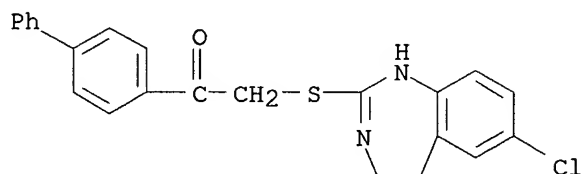


RN 318529-75-8 CAPLUS  
 CN Ethanol, 2-[(4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)thio]- (9CI)  
 (CA INDEX NAME)



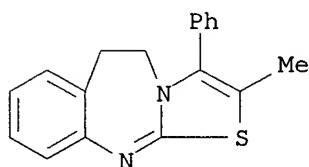
RN 318529-76-9 CAPLUS  
 CN Ethanone, 1-[1,1'-biphenyl]-4-yl-2-[(7-chloro-4,5-dihydro-1H-1,3-

benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



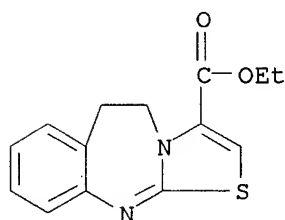
RN 318529-77-0 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-2-methyl-3-phenyl- (9CI)  
(CA INDEX NAME)



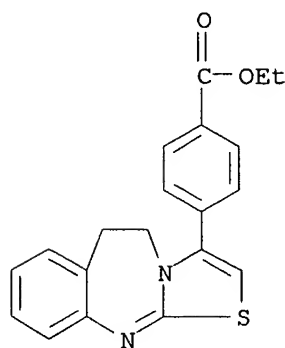
RN 318529-78-1 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine-3-carboxylic acid, 5,6-dihydro-, ethyl ester (9CI) (CA INDEX NAME)



RN 318529-79-2 CAPLUS

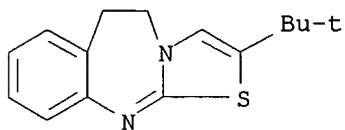
CN Benzoic acid, 4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)-, ethyl ester (9CI) (CA INDEX NAME)



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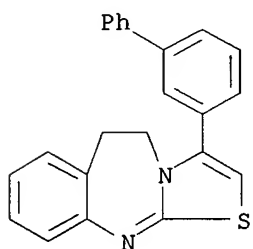
RN 318529-80-5 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 2-(1,1-dimethylethyl)-5,6-dihydro-  
(9CI) (CA INDEX NAME)



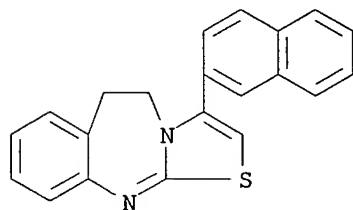
RN 318529-81-6 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[1,1'-biphenyl]-3-yl-5,6-dihydro-  
(9CI) (CA INDEX NAME)



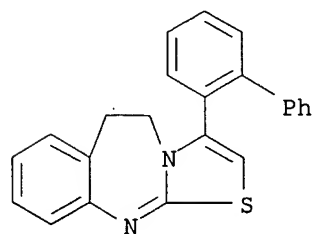
RN 318529-82-7 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(2-naphthalenyl)- (9CI)  
(CA INDEX NAME)



RN 318529-83-8 CAPLUS

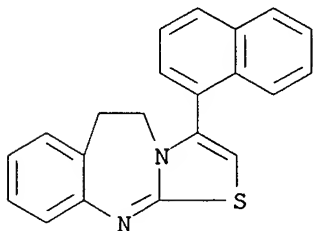
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[1,1'-biphenyl]-2-yl-5,6-dihydro-  
(9CI) (CA INDEX NAME)



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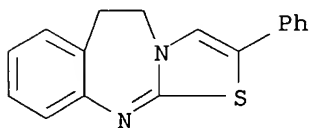
RN 318529-84-9 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(1-naphthalenyl)- (9CI)  
(CA INDEX NAME)



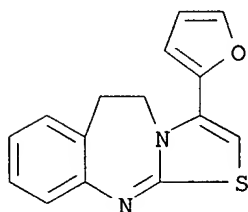
RN 318529-85-0 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-2-phenyl- (9CI) (CA INDEX NAME)



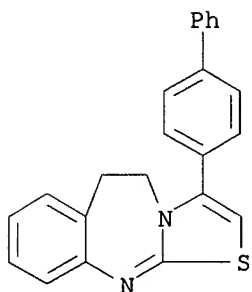
RN 318529-86-1 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(2-furanyl)-5,6-dihydro- (9CI) (CA INDEX NAME)



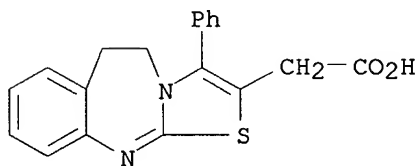
RN 318529-87-2 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[1,1'-biphenyl]-4-yl-5,6-dihydro-,  
monohydrochloride (9CI) (CA INDEX NAME)

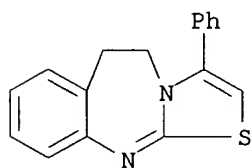


● HCl

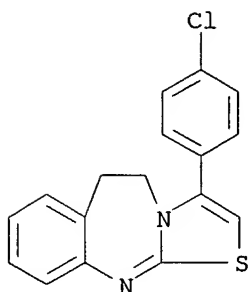
RN 318529-88-3 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine-2-acetic acid, 5,6-dihydro-3-phenyl- (9CI) (CA INDEX NAME)



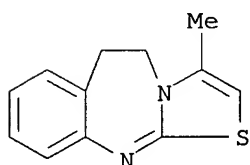
RN 318529-89-4 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-phenyl- (9CI) (CA INDEX NAME)



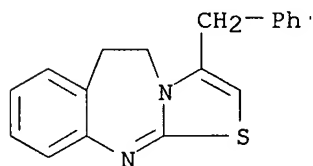
RN 318529-90-7 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(4-chlorophenyl)-5,6-dihydro- (9CI) (CA INDEX NAME)



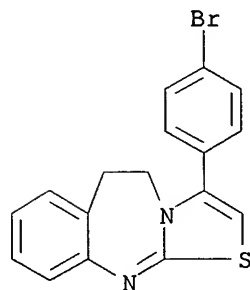
RN 318529-91-8 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)



RN 318529-92-9 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



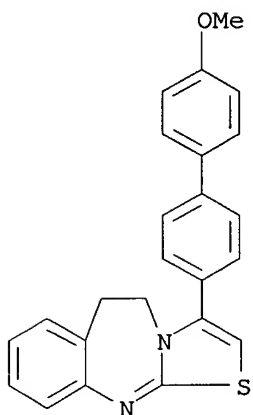
RN 318529-93-0 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(4-bromophenyl)-5,6-dihydro- (9CI) (CA INDEX NAME)



RN 318529-94-1 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(4'-methoxy[1,1'-

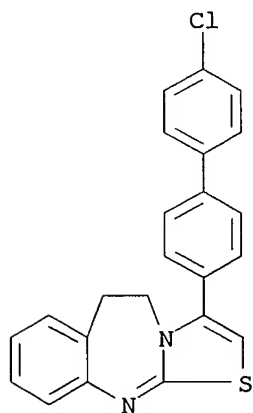
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biphenyl]-4-yl)- (9CI) (CA INDEX NAME)



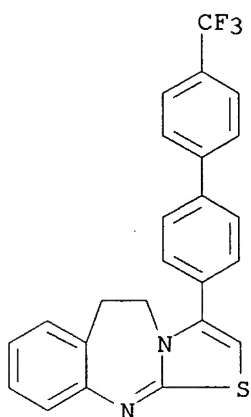
RN 318529-95-2 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(4'-chloro[1,1'-biphenyl]-4-yl)-5,6-dihydro- (9CI) (CA INDEX NAME)



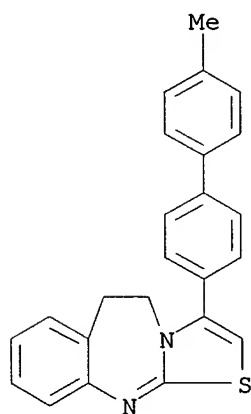
RN 318529-96-3 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)



RN 318529-97-4 CAPLUS

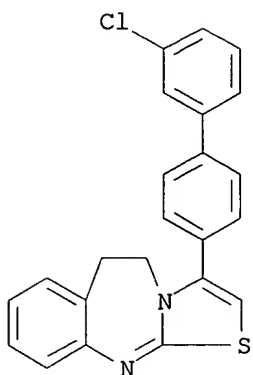
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(4'-methyl[1,1'-biphenyl]-4-yl)- (9CI) (CA INDEX NAME)



RN 318529-98-5 CAPLUS

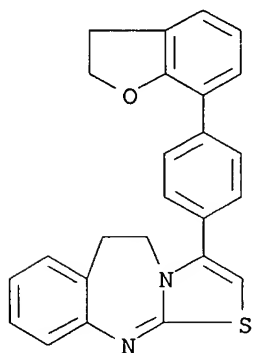
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(3'-chloro[1,1'-biphenyl]-4-yl)-5,6-dihydro- (9CI) (CA INDEX NAME)





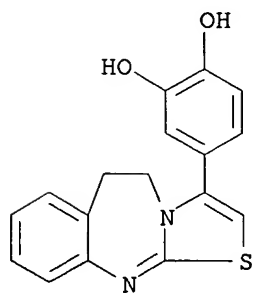
RN 318529-99-6 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[4-(2,3-dihydro-7-benzofuranyl)phenyl]-5,6-dihydro- (9CI). (CA INDEX NAME)



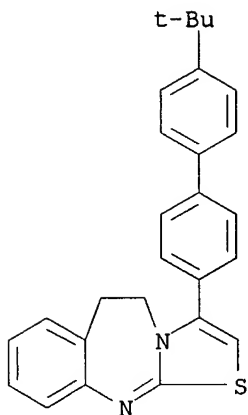
RN 318530-00-6 CAPLUS

CN 1,2-Benzenediol, 4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)- (9CI) (CA INDEX NAME)



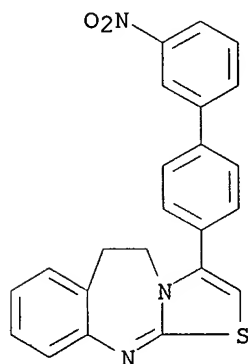
RN 318530-01-7 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[4'-(1,1-dimethylethyl)[1,1'-biphenyl]-4-yl]-5,6-dihydro- (9CI) (CA INDEX NAME)



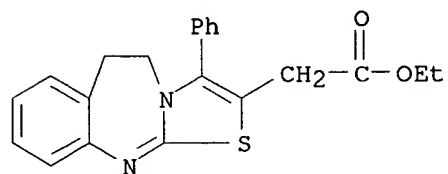
RN 318530-02-8 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(3'-nitro[1,1'-biphenyl]-4-yl)- (9CI) (CA INDEX NAME)



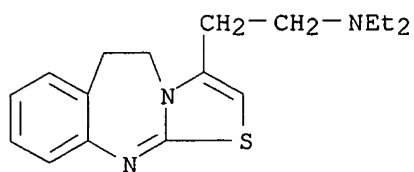
RN 318530-03-9 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine-2-acetic acid, 5,6-dihydro-3-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



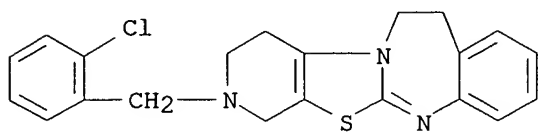
RN 318530-04-0 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine-3-ethanamine, N,N-diethyl-5,6-dihydro- (9CI) (CA INDEX NAME)



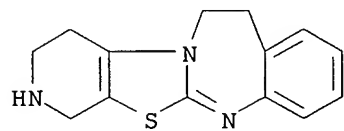
RN 318530-05-1 CAPLUS

CN Pyrido[4',3':4,5]thiazolo[2,3-b][1,3]benzodiazepine, 2-[(2-chlorophenyl)methyl]-1,2,3,4,6,7-hexahydro- (9CI) (CA INDEX NAME)



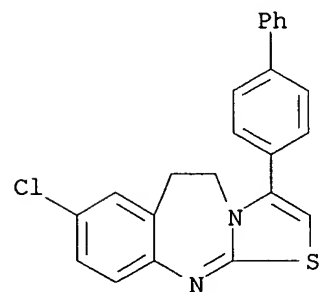
RN 318530-06-2 CAPLUS

CN Pyrido[4',3':4,5]thiazolo[2,3-b][1,3]benzodiazepine, 1,2,3,4,6,7-hexahydro- (9CI) (CA INDEX NAME)



RN 318530-07-3 CAPLUS

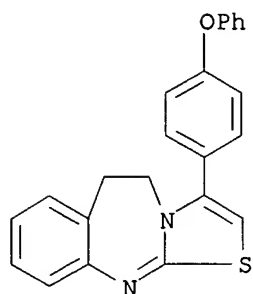
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[1,1'-biphenyl]-4-yl-8-chloro-5,6-dihydro- (9CI) (CA INDEX NAME)



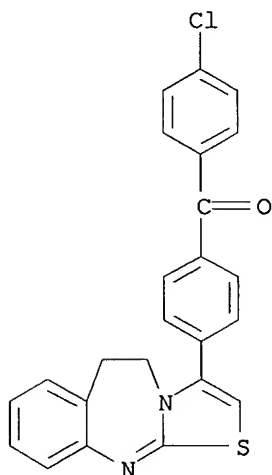
RN 318530-08-4 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

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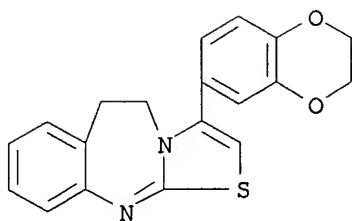


RN 318530-09-5 CAPLUS  
CN Methanone, (4-chlorophenyl)[4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



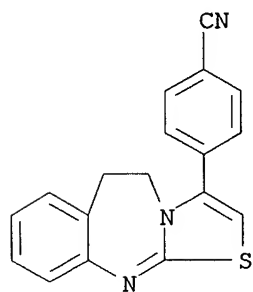
● HCl

RN 318530-10-8 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(2,3-dihydro-1,4-benzodioxin-6-yl)-5,6-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



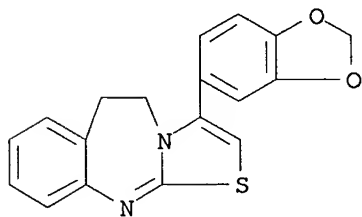
● HCl

RN 318530-11-9 CAPLUS  
CN Benzonitrile, 4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

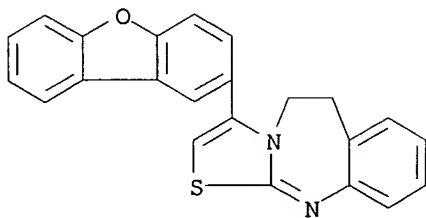
RN 318530-12-0 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(1,3-benzodioxol-5-yl)-5,6-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

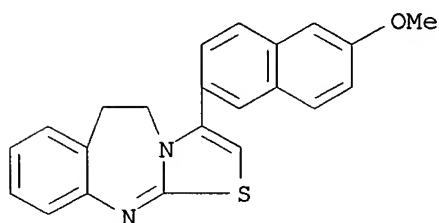
RN 318530-13-1 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(2-dibenzofuranyl)-5,6-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)

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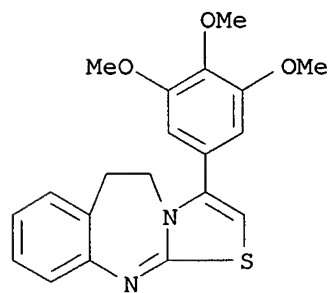
● HCl

RN 318530-14-2 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(6-methoxy-2-naphthalenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-15-3 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(3,4,5-trimethoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

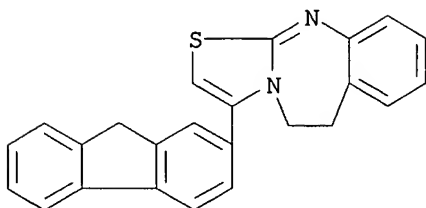


● HCl

RN 318530-16-4 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(9H-fluoren-2-yl)-5,6-dihydro-,

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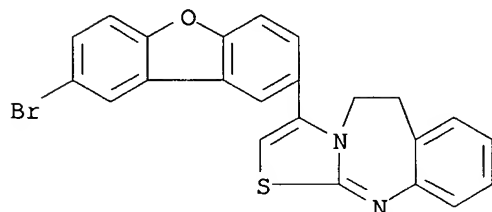
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-17-5 CAPLUS

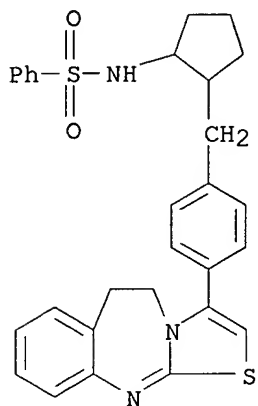
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(8-bromo-2-dibenzofuranyl)-5,6-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-18-6 CAPLUS

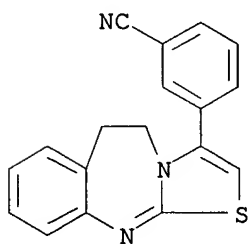
CN Benzenesulfonamide, N-[2-[[4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)phenyl]methyl]cyclopentyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-19-7 CAPLUS

CN Benzonitrile, 3-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

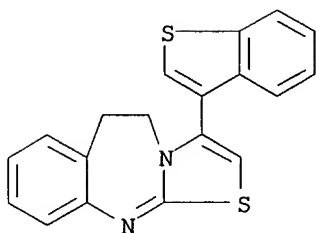


● HCl

RN 318530-20-0 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-benzo[b]thien-3-yl-5,6-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)

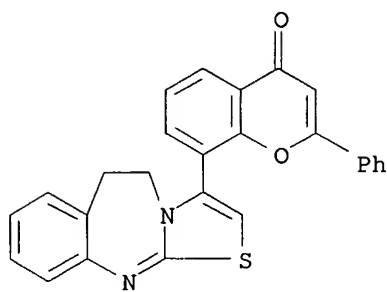




● HCl

RN 318530-21-1 CAPLUS

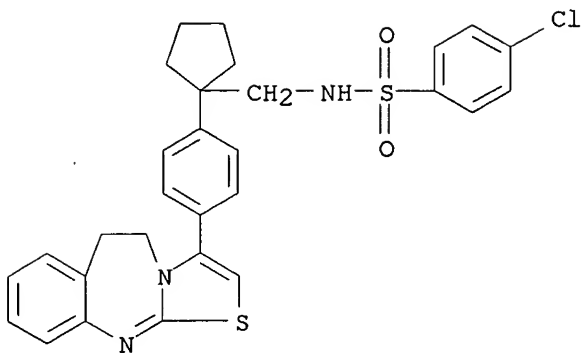
CN 4H-1-Benzopyran-4-one, 8-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)-2-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

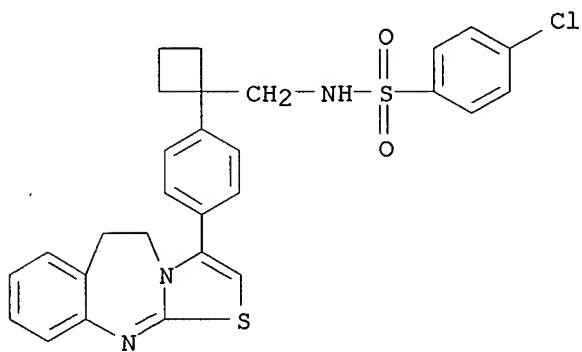
RN 318530-22-2 CAPLUS

CN Benzenesulfonamide, 4-chloro-N-[[1-[4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)phenyl]cyclopentyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



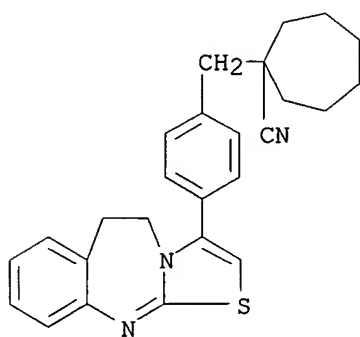
● HCl

RN 318530-23-3 CAPLUS  
 CN Benzenesulfonamide, 4-chloro-N-[[1-[4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)phenyl]cyclobutyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

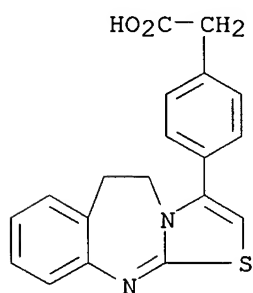
RN 318530-24-4 CAPLUS  
 CN Cycloheptanecarbonitrile, 1-[[4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)phenyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-25-5 CAPLUS

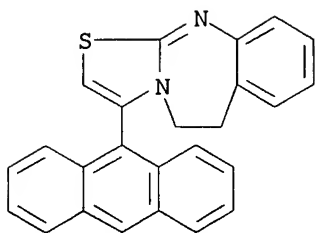
CN Benzeneacetic acid, 4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

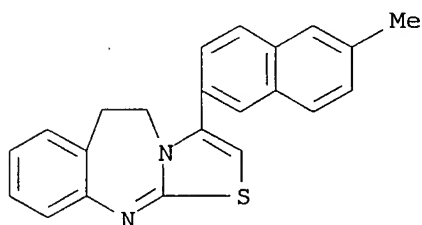
RN 318530-26-6 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(9-anthracenyl)-5,6-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



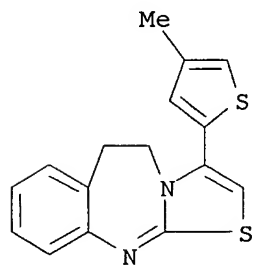
● HCl

RN 318530-27-7 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(6-methyl-2-naphthalenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

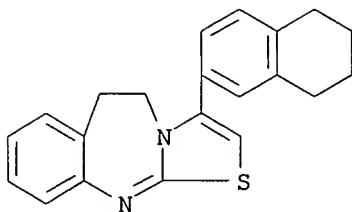
RN 318530-28-8 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(4-methyl-2-thienyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-29-9 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(5,6,7,8-tetrahydro-2-naphthalenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

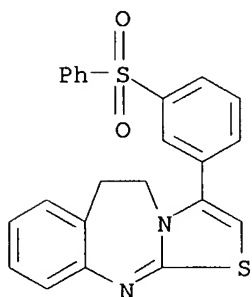
10/019,683



● HCl

RN 318530-30-2 CAPLUS

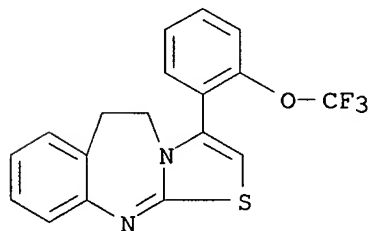
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[3-(phenylsulfonyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-31-3 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[2-(trifluoromethoxy)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

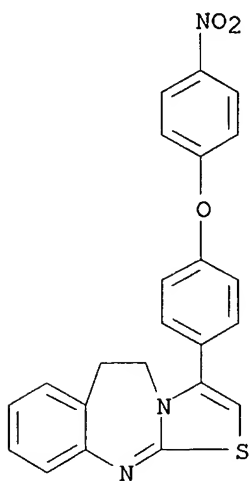


● HCl

RN 318530-32-4 CAPLUS

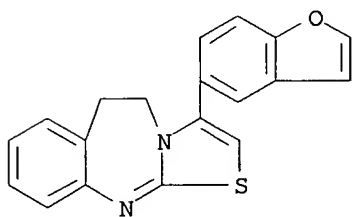
10/019,683

CN    Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[4-(4-nitrophenoxy)phenyl]-, monohydrochloride (9CI)    (CA INDEX NAME)



● HCl

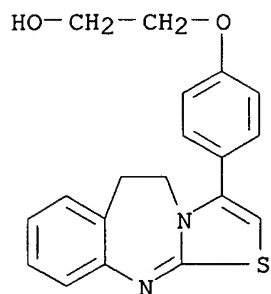
RN    318530-33-5    CAPLUS  
CN    Thiazolo[2,3-b][1,3]benzodiazepine, 3-(5-benzofuranyl)-5,6-dihydro-, monohydrochloride (9CI)    (CA INDEX NAME)



● HCl

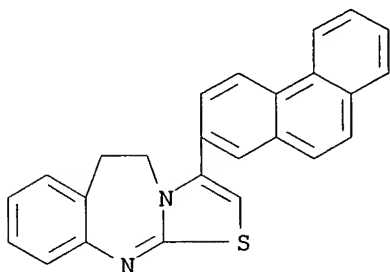
RN    318530-34-6    CAPLUS  
CN    Ethanol, 2-[4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)phenoxy]-, monohydrochloride (9CI)    (CA INDEX NAME)

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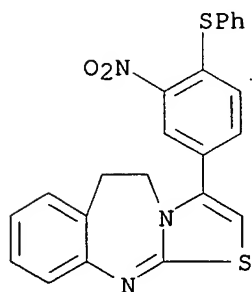
● HCl

RN 318530-35-7 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(2-phenanthrenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-36-8 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[3-nitro-4-(phenylthio)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

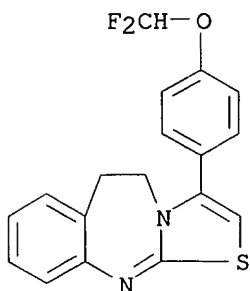
RN 318530-37-9 CAPLUS

CN 11H-Indeno[2',1':4,5]thiazolo[2,3-b][1,3]benzodiazepine, 13,14-dihydro-  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 318530-38-0 CAPLUS

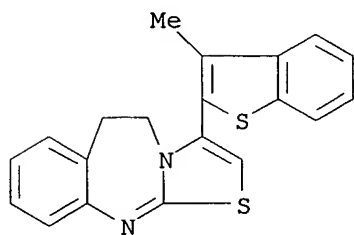
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[4-(difluoromethoxy)phenyl]-5,6-  
dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 318530-39-1 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(3-methylbenzo[b]thien-2-  
yl)-, monohydrochloride (9CI) (CA INDEX NAME)



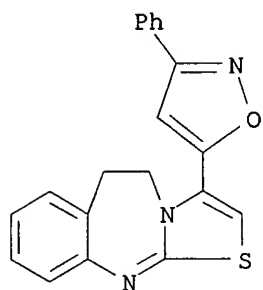
● HCl

RN 318530-40-4 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(3-phenyl-5-isoxazolyl)-  
, monohydrochloride (9CI) (CA INDEX NAME)

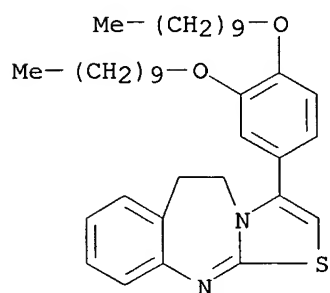


10/019,683

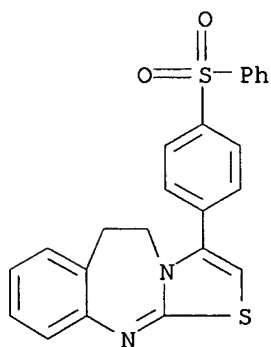


● HCl

RN 318530-41-5 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[3,4-bis(decyloxy)phenyl]-5,6-dihydro- (9CI) (CA INDEX NAME)



RN 318530-42-6 CAPLUS  
CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[4-(phenylsulfonyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

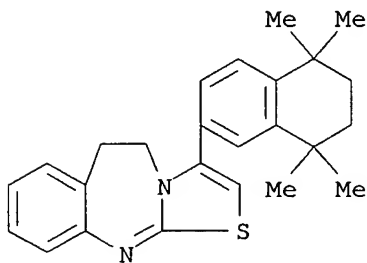


● HCl

RN 318530-43-7 CAPLUS

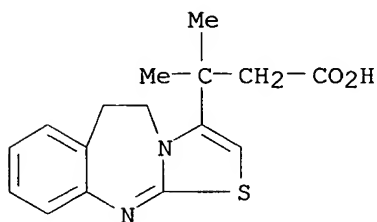
10/019,683

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 318530-44-8 CAPLUS

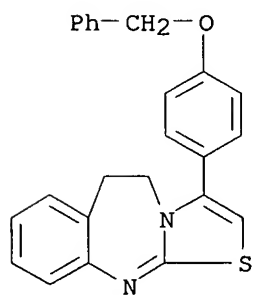
CN Thiazolo[2,3-b][1,3]benzodiazepine-3-propanoic acid, 5,6-dihydro- $\beta,\beta$ -dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

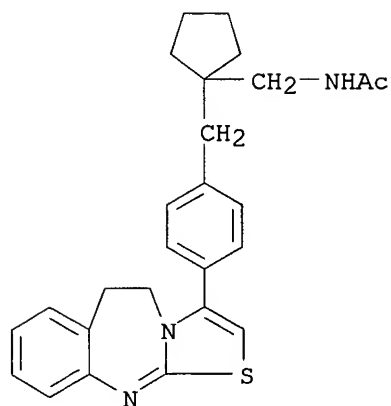
RN 318530-45-9 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

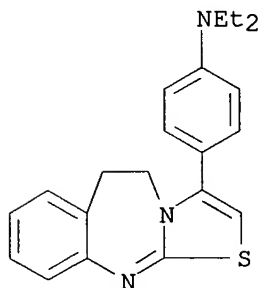


RN 318530-46-0 CAPLUS

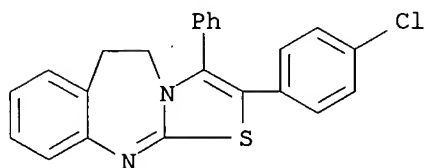
CN Acetamide, N-[[1-[[4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)phenyl]methyl]cyclopentyl]methyl]- (9CI) (CA INDEX NAME)



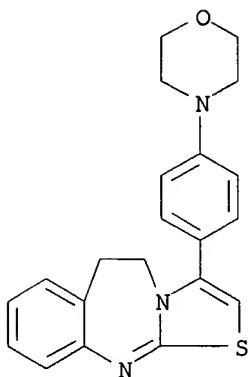
RN 318530-47-1 CAPLUS  
 CN Benzenamine, 4-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)-N,N-diethyl- (9CI) (CA INDEX NAME)



RN 318530-48-2 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 2-(4-chlorophenyl)-5,6-dihydro-3-phenyl- (9CI) (CA INDEX NAME)

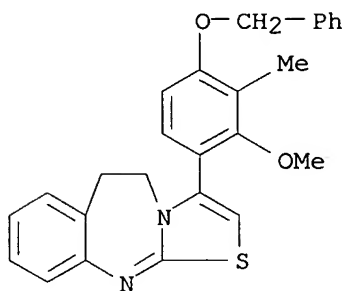


RN 318530-49-3 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



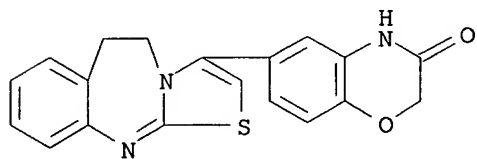
RN 318530-50-6 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[2-methoxy-3-methyl-4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



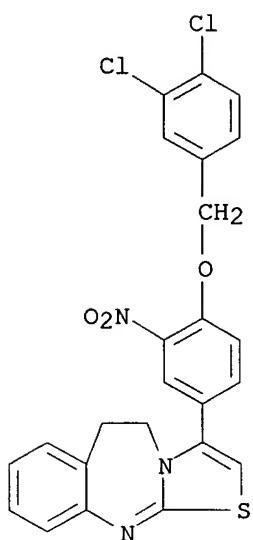
RN 318530-51-7 CAPLUS

CN 2H-1,4-Benzoxazin-3(4H)-one, 6-(5,6-dihydrothiazolo[2,3-b][1,3]benzodiazepin-3-yl)- (9CI) (CA INDEX NAME)



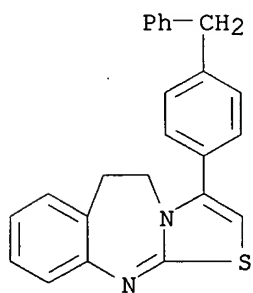
RN 318530-52-8 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[4-[(3,4-dichlorophenyl)methoxy]-3-nitrophenyl]-5,6-dihydro- (9CI) (CA INDEX NAME)



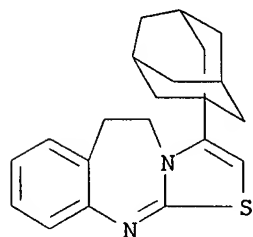
RN 318530-53-9 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[4-(phenylmethoxy)phenyl]-  
(9CI) (CA INDEX NAME)



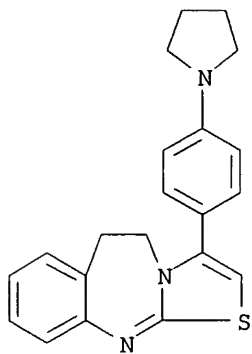
RN 318530-54-0 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-tricyclo[3.3.1.1<sup>3,7</sup>]dec-  
1-yl- (9CI) (CA INDEX NAME)



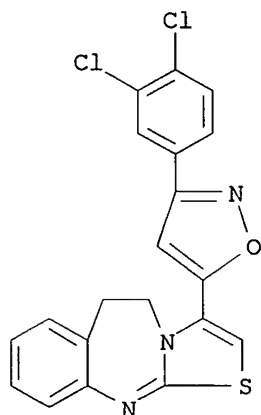
RN 318530-55-1 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-[4-(1-  
pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME)



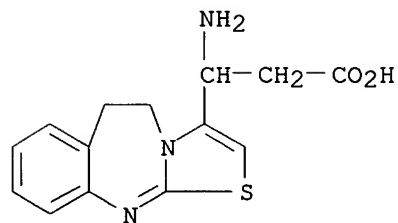
RN 318530-56-2 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-[3-(3,4-dichlorophenyl)-5-isoxazolyl]-5,6-dihydro- (9CI) (CA INDEX NAME)



RN 318530-57-3 CAPLUS

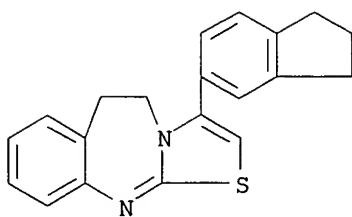
CN Thiazolo[2,3-b][1,3]benzodiazepine-3-propanoic acid,  $\beta$ -amino-5,6-dihydro- (9CI) (CA INDEX NAME)



RN 318530-58-4 CAPLUS

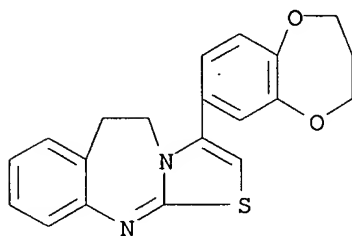
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(2,3-dihydro-1H-inden-5-yl)-5,6-dihydro- (9CI) (CA INDEX NAME)

10/019,683



RN 318530-59-5 CAPLUS

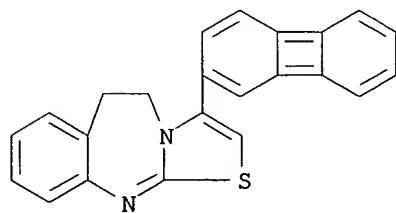
CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(3,4-dihydro-2H-1,5-benzodioxepin-7-yl)-5,6-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

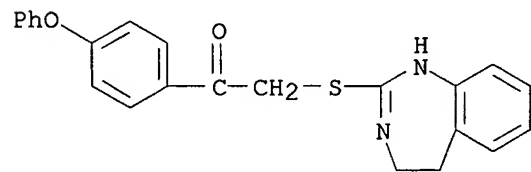
RN 318530-60-8 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 3-(2-biphenylenyl)-5,6-dihydro- (9CI) (CA INDEX NAME)



RN 318530-61-9 CAPLUS

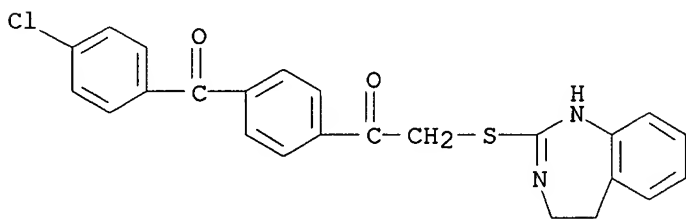
CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



10/019,683

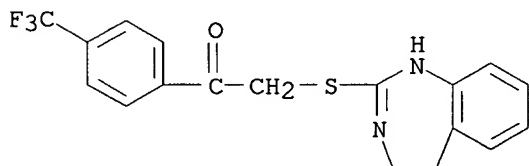
RN 318530-62-0 CAPLUS

CN Ethanone, 1-[4-(4-chlorobenzoyl)phenyl]-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



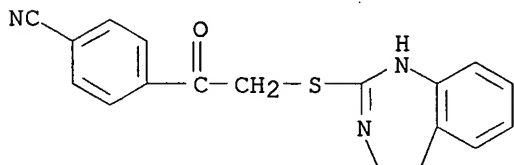
RN 318530-63-1 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



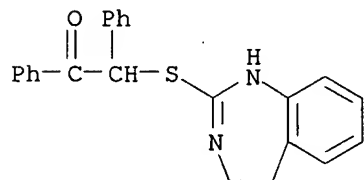
RN 318530-64-2 CAPLUS

CN Benzonitrile, 4-[[ (4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]- (9CI) (CA INDEX NAME)



RN 318530-65-3 CAPLUS

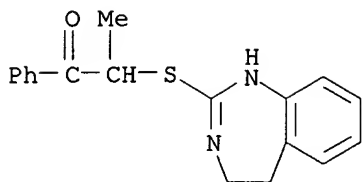
CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1,2-diphenyl- (9CI) (CA INDEX NAME)



RN 318530-66-4 CAPLUS

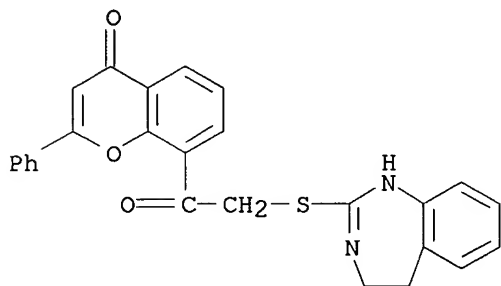
CN 1-Propanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-phenyl- (9CI) (CA INDEX NAME)





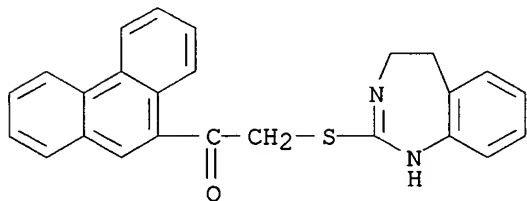
RN 318530-67-5 CAPLUS

CN 4H-1-Benzopyran-4-one, 8-[[ (4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]-2-phenyl- (9CI) (CA INDEX NAME)



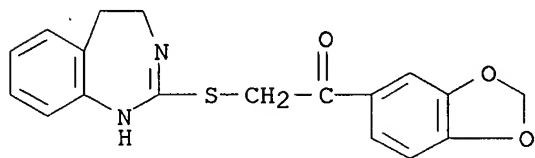
RN 318530-68-6 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(9-phenanthrenyl)- (9CI) (CA INDEX NAME)



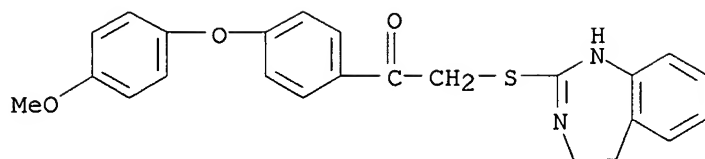
RN 318530-69-7 CAPLUS

CN Ethanone, 1-(1,3-benzodioxol-5-yl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



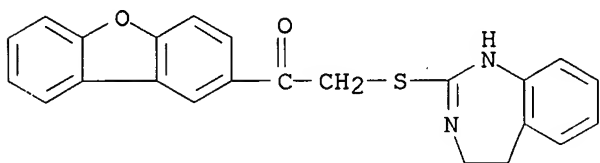
RN 318530-70-0 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-(4-methoxyphenoxy)phenyl]- (9CI) (CA INDEX NAME)



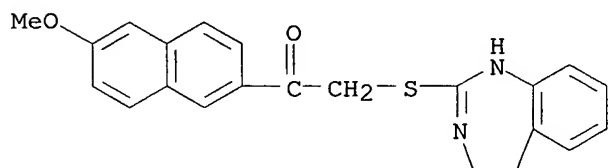
RN 318530-71-1 CAPLUS

CN Ethanone, 1-(2-dibenzofuranyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



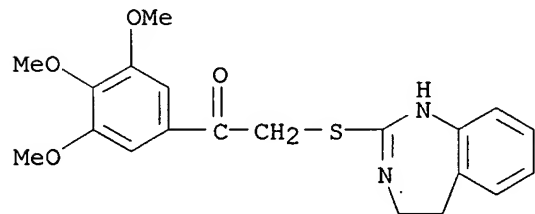
RN 318530-72-2 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(6-methoxy-2-naphthalenyl)- (9CI) (CA INDEX NAME)



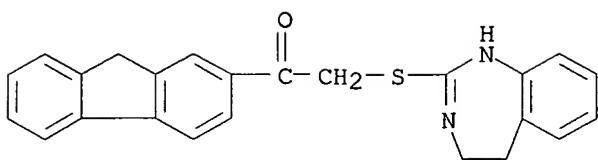
RN 318530-73-3 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



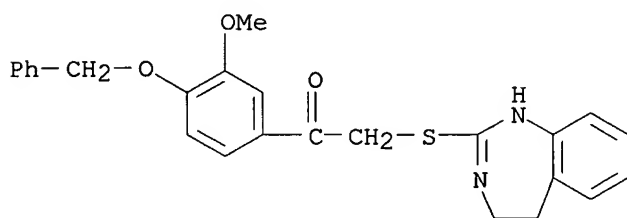
RN 318530-74-4 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(9H-fluoren-2-yl)- (9CI) (CA INDEX NAME)



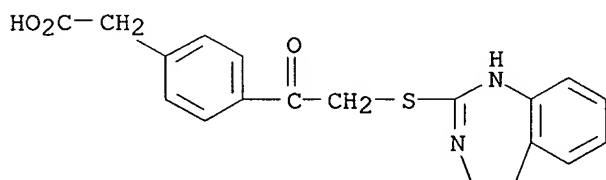
RN 318530-75-5 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[3-methoxy-4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



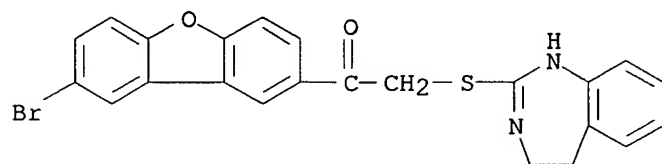
RN 318530-76-6 CAPLUS

CN Benzeneacetic acid, 4-[[ (4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]- (9CI) (CA INDEX NAME)



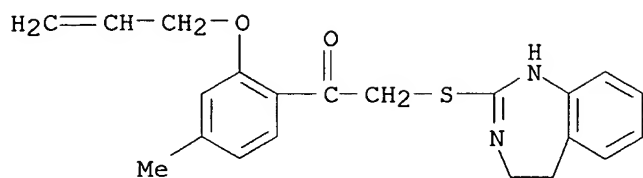
RN 318530-77-7 CAPLUS

CN Ethanone, 1-(8-bromo-2-dibenzofuranyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



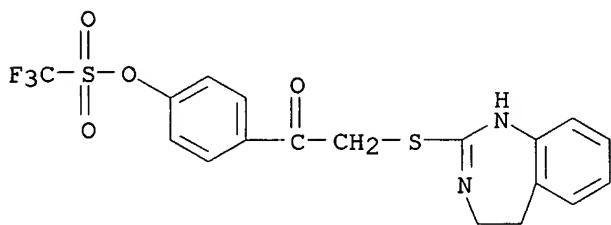
RN 318530-78-8 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-methyl-2-(2-propenyloxy)phenyl]- (9CI) (CA INDEX NAME)



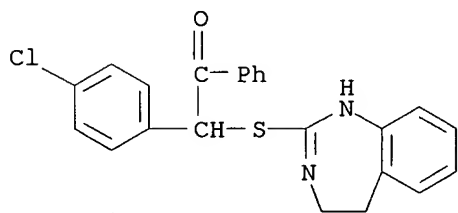
RN 318530-79-9 CAPLUS

CN Methanesulfonic acid, trifluoro-, 4-[[ (4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenyl ester (9CI) (CA INDEX NAME)



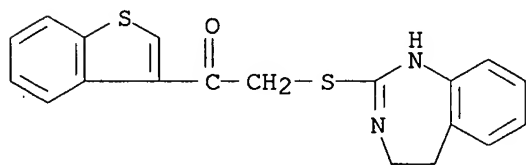
RN 318530-80-2 CAPLUS

CN Ethanone, 2-(4-chlorophenyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-phenyl- (9CI) (CA INDEX NAME)



RN 318530-81-3 CAPLUS

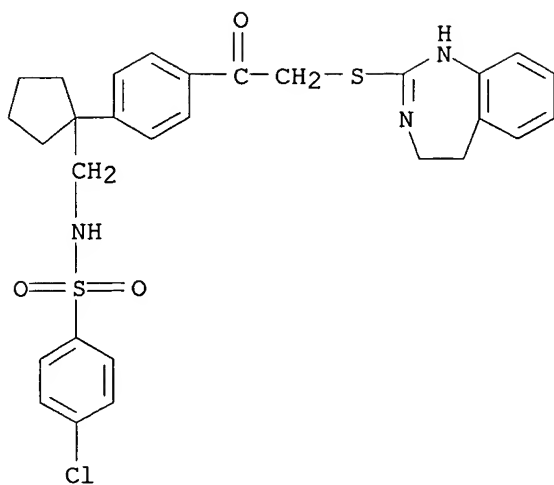
CN Ethanone, 1-benzo[b]thien-3-yl-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



RN 318530-82-4 CAPLUS

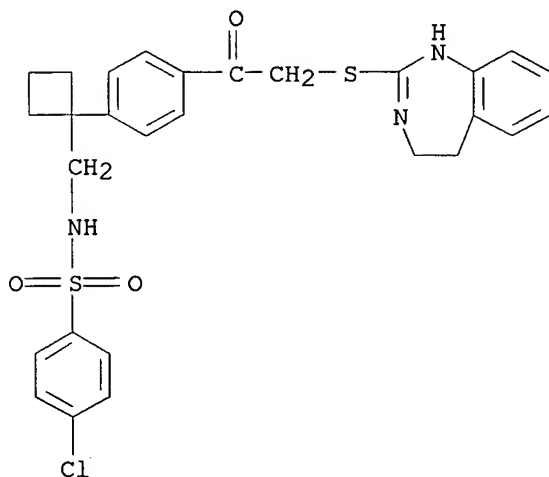
CN Benzenesulfonamide, 4-chloro-N-[[1-[4-[[ (4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenyl]cyclopentyl]methyl]- (9CI) (CA INDEX NAME)

1



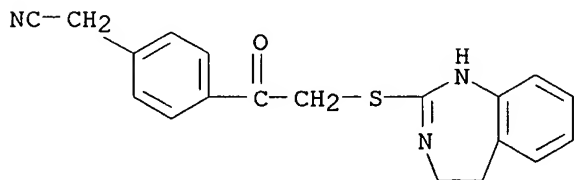
RN 318530-83-5 CAPLUS

Benzenesulfonamide, 4-chloro-N-[[[1-[4-[[4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenyl]cyclobutyl]methyl]- (9CI) (CA INDEX NAME)



RN 318530-84-6 CAPLUS

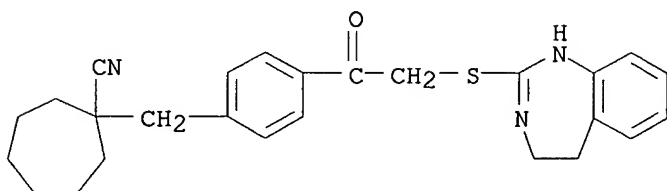
CN Benzeneacetonitrile, 4-[[ (4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]- (9CI) (CA INDEX NAME)



RN 318530-85-7 CAPLUS

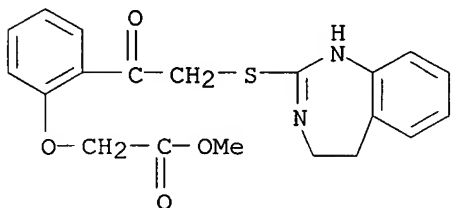
10/019,683

CN Cycloheptanecarbonitrile, 1-[[4-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



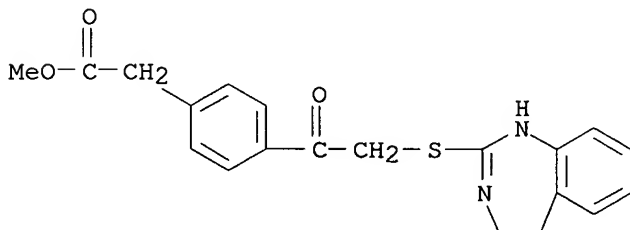
RN 318530-86-8 CAPLUS

CN Acetic acid, [2-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



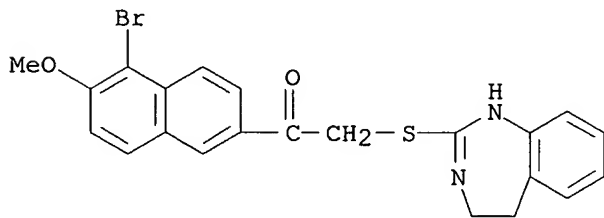
RN 318530-87-9 CAPLUS

CN Benzeneacetic acid, 4-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 318530-88-0 CAPLUS

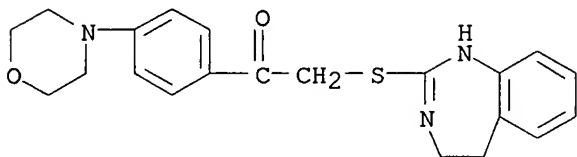
CN Ethanone, 1-(5-bromo-6-methoxy-2-naphthalenyl)-2-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



10/019,683

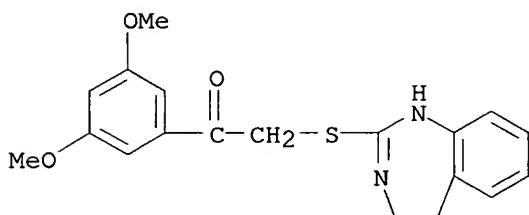
RN 318530-89-1 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



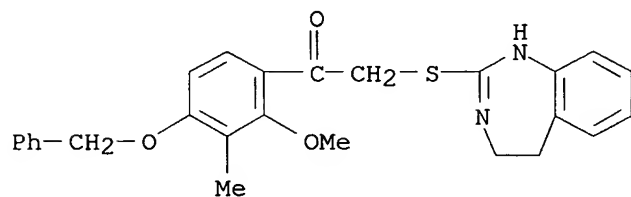
RN 318530-90-4 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(3,5-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



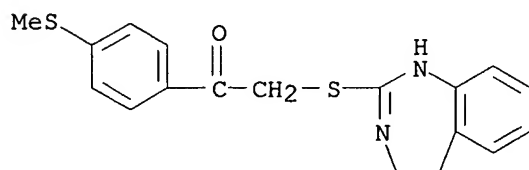
RN 318530-91-5 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[2-methoxy-3-methyl-4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



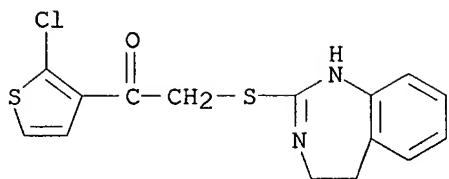
RN 318530-92-6 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-(methylthio)phenyl]- (9CI) (CA INDEX NAME)



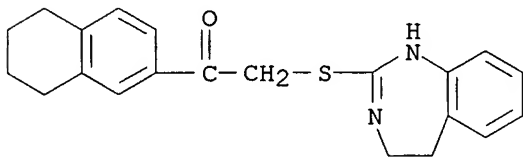
RN 318530-93-7 CAPLUS

CN Ethanone, 1-(2-chloro-3-thienyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



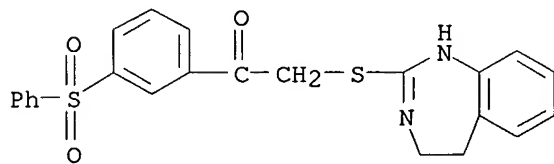
RN 318530-94-8 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(5,6,7,8-tetrahydro-2-naphthalenyl)- (9CI) (CA INDEX NAME)



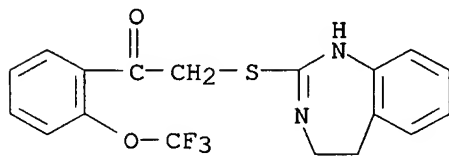
RN 318530-95-9 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[3-(phenylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



RN 318530-96-0 CAPLUS

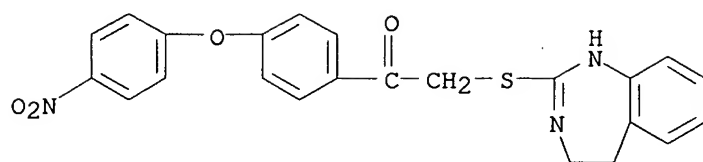
CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 318530-97-1 CAPLUS

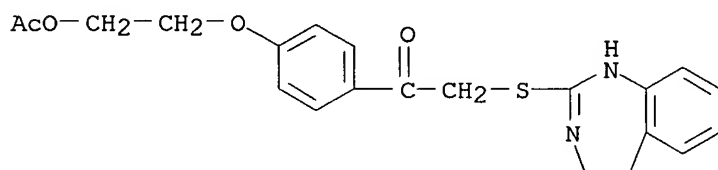
CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-(4-nitrophenoxy)phenyl]- (9CI) (CA INDEX NAME)





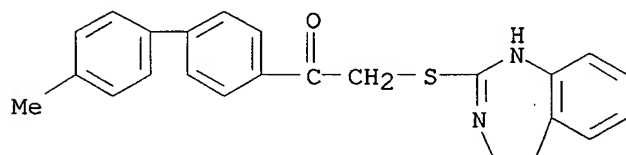
RN 318530-98-2 CAPLUS

CN Ethanone, 1-[4-[2-(acetyloxy)ethoxy]phenyl]-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



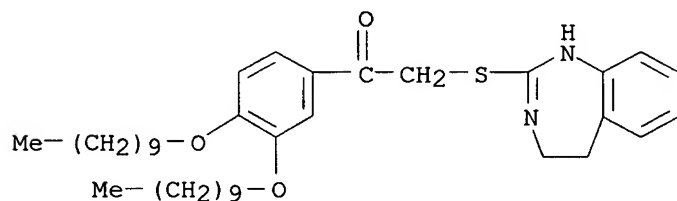
RN 318530-99-3 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(4'-methyl[1,1'-biphenyl]-4-yl)- (9CI) (CA INDEX NAME)



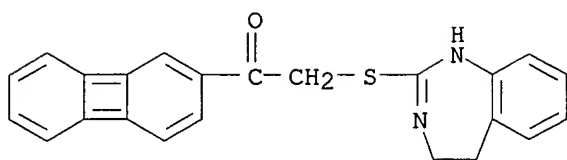
RN 318531-00-9 CAPLUS

CN Ethanone, 1-[3,4-bis(decyloxy)phenyl]-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



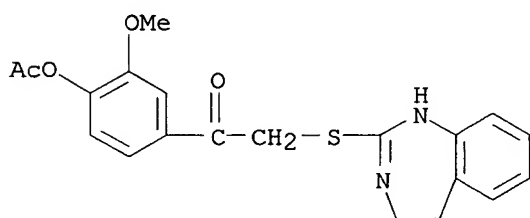
RN 318531-01-0 CAPLUS

CN Ethanone, 1-(2-biphenylenyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



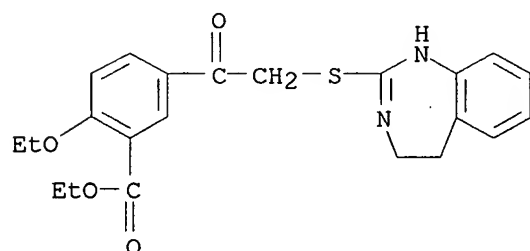
RN 318531-02-1 CAPLUS

CN Ethanone, 1-[4-(acetyloxy)-3-methoxyphenyl]-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



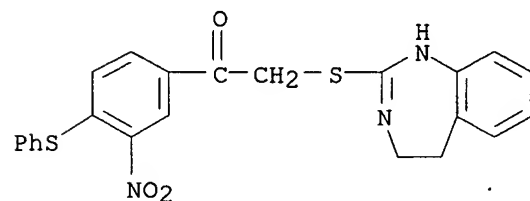
RN 318531-03-2 CAPLUS

CN Benzoic acid, 5-[[4-(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]-2-ethoxy-, ethyl ester (9CI) (CA INDEX NAME)



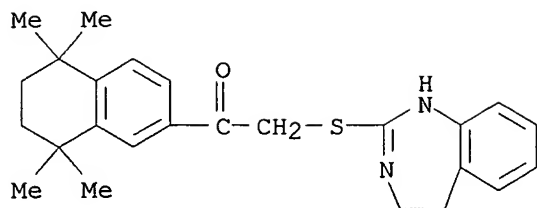
RN 318531-04-3 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[3-nitro-4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)



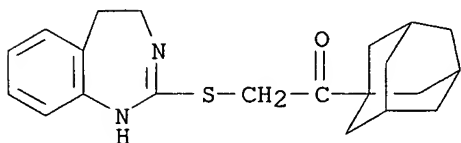
RN 318531-05-4 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)- (9CI) (CA INDEX NAME)



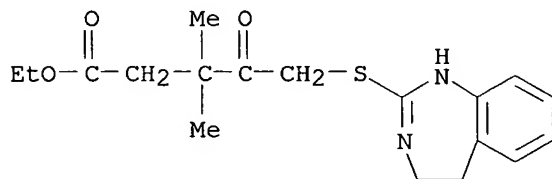
RN 318531-06-5 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl- (9CI) (CA INDEX NAME)



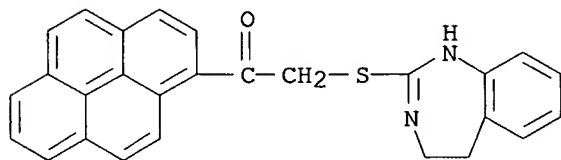
RN 318531-07-6 CAPLUS

CN Pentanoic acid, 5-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-3,3-dimethyl-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



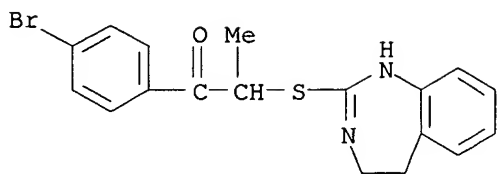
RN 318531-08-7 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(1-pyrenyl)- (9CI) (CA INDEX NAME)

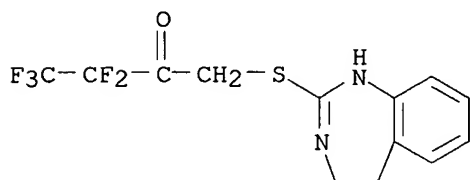


RN 318531-09-8 CAPLUS

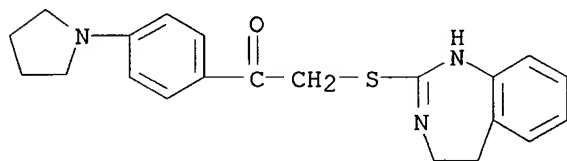
CN 1-Propanone, 1-(4-bromophenyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



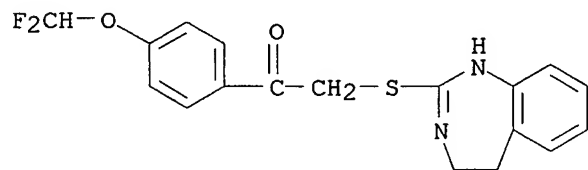
RN 318531-10-1 CAPLUS  
 CN 2-Butanone, 1-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-3,3,4,4,4-pentafluoro- (9CI) (CA INDEX NAME)



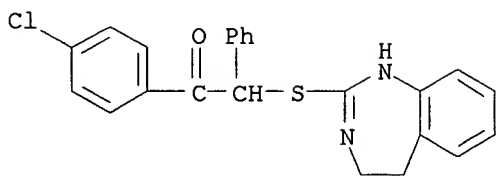
RN 318531-11-2 CAPLUS  
 CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-(1-pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME)



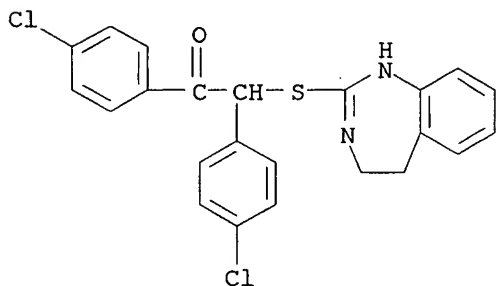
RN 318531-12-3 CAPLUS  
 CN Ethanone, 1-[4-(difluoromethoxy)phenyl]-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



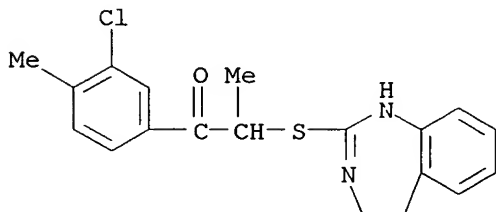
RN 318531-13-4 CAPLUS  
 CN Ethanone, 1-(4-chlorophenyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-2-phenyl- (9CI) (CA INDEX NAME)



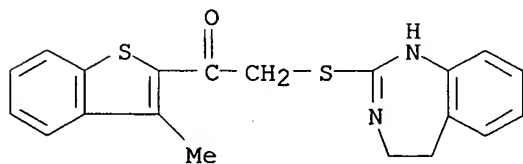
RN 318531-14-5 CAPLUS  
 CN Ethanone, 1,2-bis(4-chlorophenyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



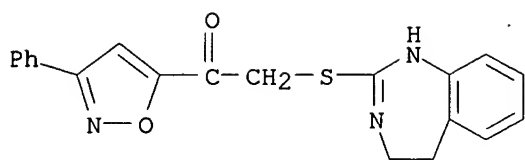
RN 318531-15-6 CAPLUS  
 CN 1-Propanone, 1-(3-chloro-4-methylphenyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



RN 318531-16-7 CAPLUS  
 CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(3-methylbenzo[b]thien-2-yl)- (9CI) (CA INDEX NAME)

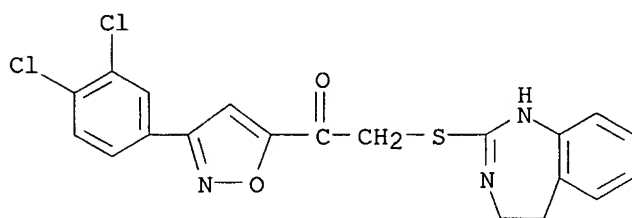


RN 318531-17-8 CAPLUS  
 CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(3-phenyl-5-isoxazolyl)- (9CI) (CA INDEX NAME)



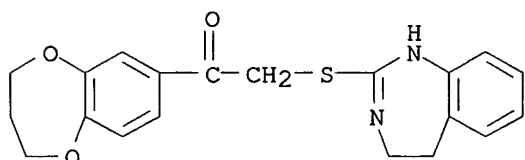
RN 318531-18-9 CAPLUS

CN Ethanone, 1-[3-(3,4-dichlorophenyl)-5-isoxazolyl]-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



RN 318531-19-0 CAPLUS

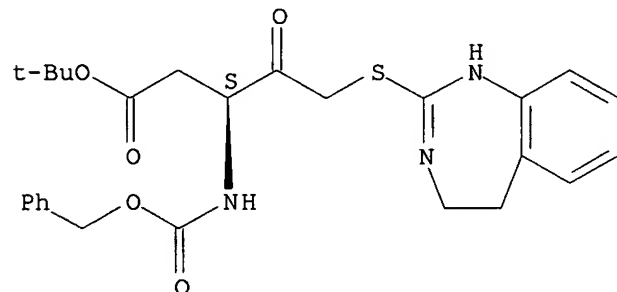
CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(3,4-dihydro-2H-1,5-benzodioxepin-7-yl)- (9CI) (CA INDEX NAME)



RN 318531-20-3 CAPLUS

CN Pentanoic acid, 5-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-4-oxo-3-[[[(phenylmethoxy)carbonyl]amino]-1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

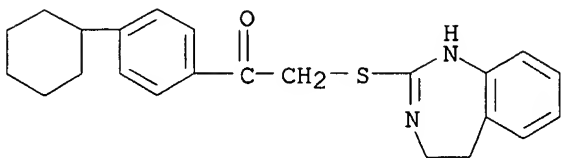
Absolute stereochemistry.



RN 318531-21-4 CAPLUS

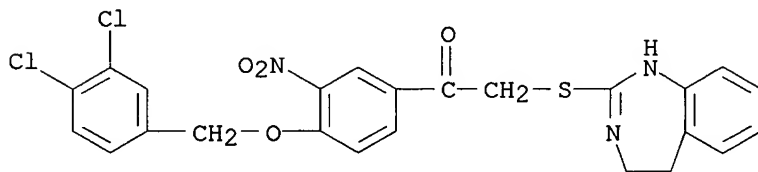
CN Ethanone, 1-(4-cyclohexylphenyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-

yl)thio]- (9CI) (CA INDEX NAME)



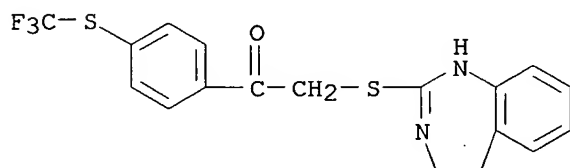
RN 318531-22-5 CAPLUS

CN Ethanone, 1-[4-[(3,4-dichlorophenyl)methoxy]-3-nitrophenyl]-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



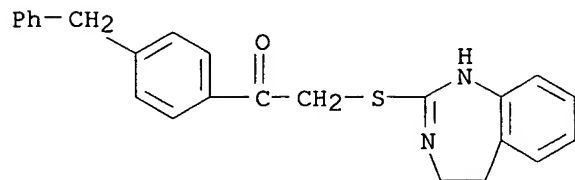
RN 318531-23-6 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-[(trifluoromethyl)thio]phenyl]- (9CI) (CA INDEX NAME)



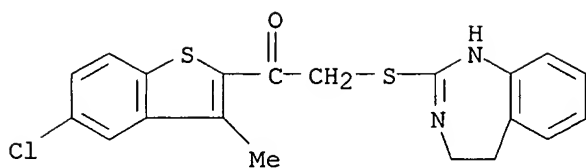
RN 318531-24-7 CAPLUS

CN Ethanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-[4-(phenylmethyl)phenyl]- (9CI) (CA INDEX NAME)



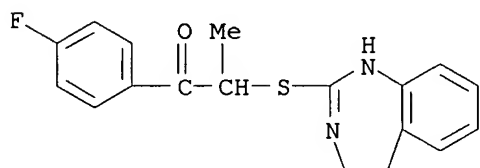
RN 318531-25-8 CAPLUS

CN Ethanone, 1-(5-chloro-3-methylbenzo[b]thien-2-yl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



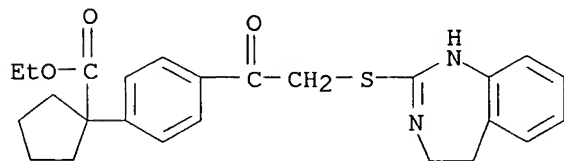
RN 318531-26-9 CAPLUS

CN 1-Propanone, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-1-(4-fluorophenyl)- (9CI) (CA INDEX NAME)



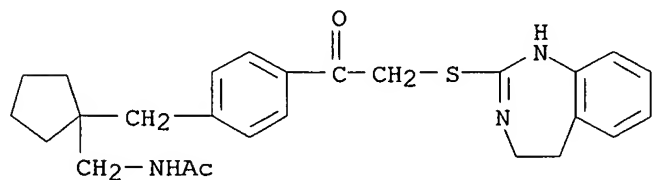
RN 318531-27-0 CAPLUS

CN Cyclopentanecarboxylic acid, 1-[4-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 318531-28-1 CAPLUS

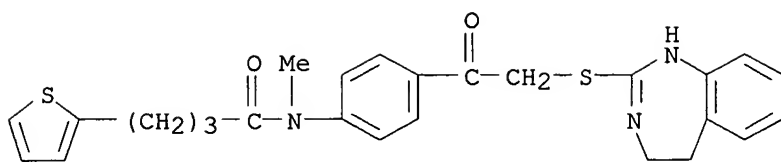
CN Acetamide, N-[[1-[[4-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenyl]methyl]cyclopentyl]methyl]- (9CI) (CA INDEX NAME)



RN 318531-29-2 CAPLUS

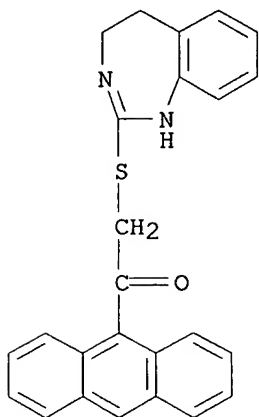
CN 2-Thiophenebutanamide, N-[4-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)





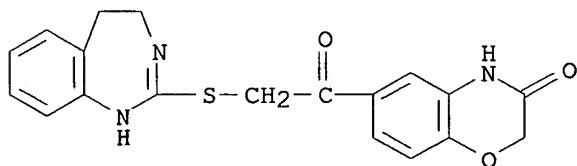
RN 318531-30-5 CAPLUS

CN Ethanone, 1-(9-anthracenyl)-2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]- (9CI) (CA INDEX NAME)



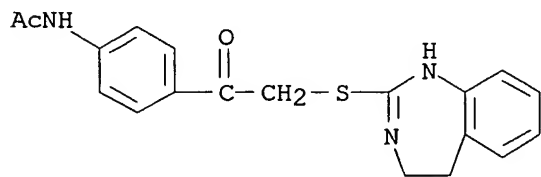
RN 318531-31-6 CAPLUS

CN 2H-1,4-Benzoxazin-3(4H)-one, 6-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]- (9CI) (CA INDEX NAME)



RN 318531-32-7 CAPLUS

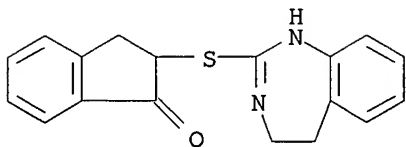
CN Acetamide, N-[4-[[[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]acetyl]phenyl]- (9CI) (CA INDEX NAME)



RN 318531-33-8 CAPLUS

10/019,683

CN 1H-Inden-1-one, 2-[(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)thio]-2,3-dihydro- (9CI) (CA INDEX NAME)

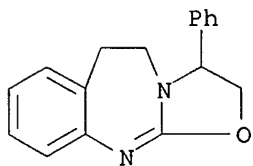


IT 88519-33-9P 318531-39-4P 318531-40-7P  
318531-41-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of dihydrobenzodiazepines and their use for treating dyslipidemia)

RN 88519-33-9 CAPLUS

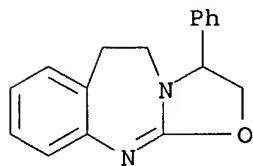
CN Oxazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-3-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

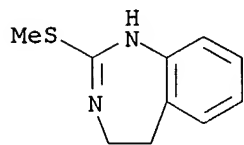
RN 318531-39-4 CAPLUS

CN Oxazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-3-phenyl- (9CI) (CA INDEX NAME)



RN 318531-40-7 CAPLUS

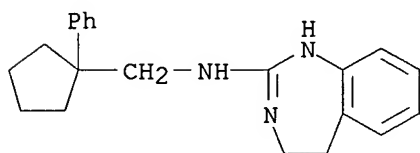
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)- (9CI) (CA INDEX NAME)



10/019,683

RN 318531-41-8 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-[(1-phenylcyclopentyl)methyl]-  
(9CI) (CA INDEX NAME)



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/019,683

~~LHA~~ ANSWER 6 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:355752 CAPLUS

DOCUMENT NUMBER: 131:719

TITLE: A covalent conjugate of clozapine with a fatty acid and its use for treating schizophrenia

INVENTOR(S): Bradley, Matthews O.; Shashoua, Victor E.; Swindell, Charles S.; Webb, Nigel L.

PATENT ASSIGNEE(S): Neuromedica, Inc., USA

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9926661	A1	19990603	WO 1998-US24412	19981116
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6197764	B1	20010306	US 1997-978541	19971126
CA 2310850	AA	19990603	CA 1998-2310850	19981116
AU 9914115	A1	19990615	AU 1999-14115	19981116
AU 746472	B2	20020502		
EP 1044023	A1	20001018	EP 1998-957987	19981116
EP 1044023	B1	20050525		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
JP 2001523732	T2	20011127	JP 2000-521862	19981116
AT 296116	E	20050615	AT 1998-957987	19981116
ES 2244098	T3	20051201	ES 1998-957987	19981116
PRIORITY APPLN. INFO.:			US 1997-978541	A 19971126
			WO 1998-US24412	W 19981116

AB The invention provides compns. that include conjugates of a fatty acid mol., preferably cis-docosahexaenoic acid, and clozapine. The conjugates are useful in treating psychol. disorders such as schizophrenia. Docosahexaenoic acid-clozapine (preparation given) was at least six times longer-acting than clozapine against locomotor behavioral arousal in rats treated with R(-) apomorphine.

IT 120360-10-3, Batelapine maleate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical further containing; clozapine conjugate with fatty acid for treating schizophrenia)

RN 120360-10-3 CAPLUS

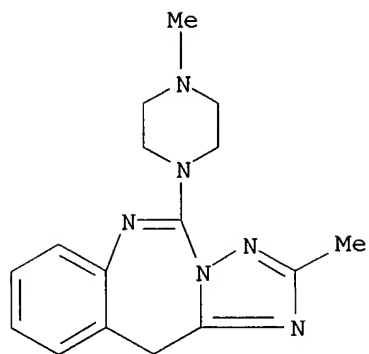
CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 95634-82-5

CMF C16 H20 N6

10/019,683

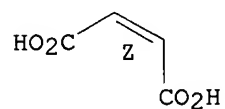


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

✓  
 L14 ANSWER 7 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:46621 CAPLUS

DOCUMENT NUMBER: 130:209679

TITLE: Preparation and Intramolecular Cyclization of Bis(carbodiimides). Synthesis and X-ray Structure of 1,3-Diazetidino-2,4-diimine Derivatives

AUTHOR(S): Alajarin, Mateo; Molina, Pedro; Sanchez-Andrada, Pilar; Foces-Foces, M. Concepcion

CORPORATE SOURCE: Departamento de Quimica Organica Facultad de Quimica, Universidad de Murcia, Murcia, E-30071, Spain

SOURCE: Journal of Organic Chemistry (1999), 64(4), 1121-1130  
 CODEN: JOCEAH; ISSN: 0022-3263

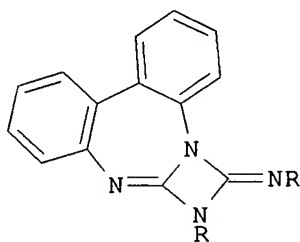
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

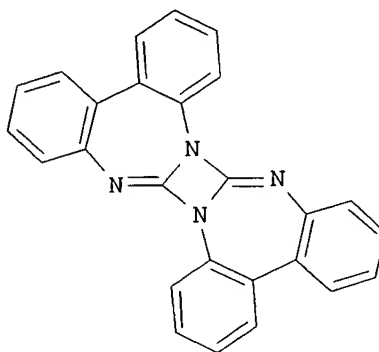
LANGUAGE: English

OTHER SOURCE(S): CASREACT 130:209679

GI



II



IV

AB Aza-Wittig reactions of bis(iminophosphorane) 2-Ph<sub>3</sub>P:NC<sub>6</sub>H<sub>4</sub>C<sub>6</sub>H<sub>4</sub>N:PPh<sub>3</sub>-2 (I), derived from 2,2'-diazidobiphenyl, with aromatic isocyanates provided dibenzo[d,f]-1,3-diazetidino[1,2-a]diazepine derivs. II [R = substituted Ph, 1-naphthyl] in moderate yields. Similar results can be achieved from the reaction of 2,2'-bis(isothiocyanato)biphenyl (III) with aryliminophosphoranes. Treatment of bis(isothiocyanate) III with arylamines and further dehydrosulfurization of the resulting bis(thioureas) leads to seven-membered ring guanidines. (2'-Azido)biphenyl-N'-arylcarbodiimides react with 1 equiv of triphenylphosphine to give zwitterionic compds., which undergo either hydrolytic cleavage to afford guanidines or react with 1 equiv of aromatic isocyanates to provide II. Cross-expts. suggest that the conversion zwitterionic compds. → II takes place through a non-isolable bis(carbodiimide) that undergoes an intramol. [2 + 2] cycloaddn. at the final step. The reaction of bis(iminophosphorane) I with an excess of carbon dioxide leads to a mixture of tricyclic 1,3-diazetidino derivative IV

and

a 14-membered cyclic bis(carbodiimide), which decomp. by thermal treatment. IV can also be obtained along with seven-membered cyclic urea derivs. from the reaction of bis(iminophosphorane) I with the carbon dioxide source Boc<sub>2</sub>O/DMAP system. A comprehensive mechanistic scheme for the aza-Wittig reactions studied is conveniently presented. The mol. and crystal structures of 1-(4-methoxyphenyl)-2-(4-methoxyphenyl)iminodibenzo[d,f]-1,3-diazetidino[1,2-a]diazepine and

[a,c]bis[dibenzo[d,f][1,3]diazepino]-1,3-diazetidene (IV) have been determined by X-ray anal.

IT 194484-24-7P 221011-14-9P 221011-15-0P

221011-16-1P 221011-17-2P 221011-18-3P

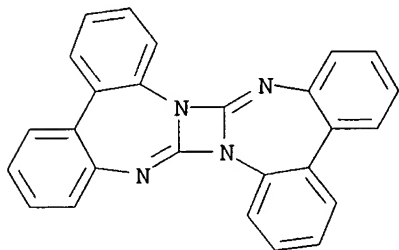
221011-20-7P 221011-37-6P 221011-39-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and intramol. cyclization of bis(carbodiimides))

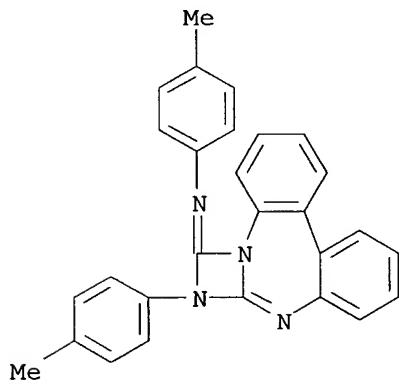
RN 194484-24-7 CAPLUS

CN Tetrabenzo[d,d',f,f'] [1,3]diazeto[1,2-a:3,4-a']bis[1,3]diazepine (9CI)  
(CA INDEX NAME)



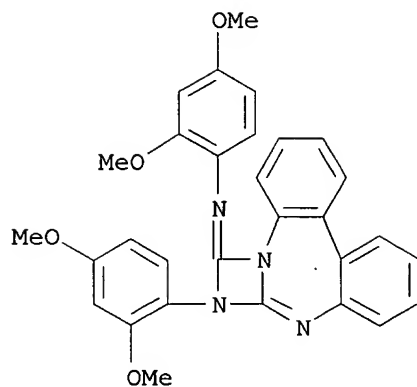
RN 221011-14-9 CAPLUS

CN Benzenamine, 4-methyl-N-[7-(4-methylphenyl)benzo[d][1,3]diazeto[1,2-a][1,3]benzodiazepin-6(7H)-ylidene]- (9CI) (CA INDEX NAME)



RN 221011-15-0 CAPLUS

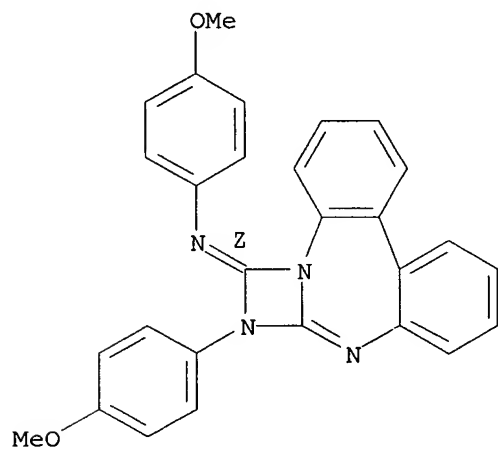
CN Benzenamine, N-[7-(2,4-dimethoxyphenyl)benzo[d][1,3]diazeto[1,2-a][1,3]benzodiazepin-6(7H)-ylidene]-2,4-dimethoxy- (9CI) (CA INDEX NAME)



RN 221011-16-1 CAPLUS

CN Benzenamine, 4-methoxy-N-[7-(4-methoxyphenyl)benzo[d][1,3]diazeto[1,2-a][1,3]benzodiazepin-6(7H)-ylidene]-, [N(Z)]- (9CI) (CA INDEX NAME)

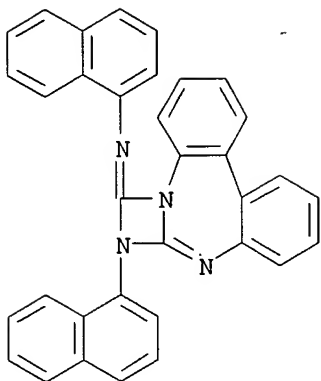
Double bond geometry as shown.



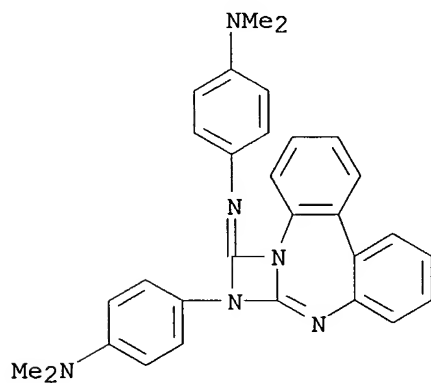
RN 221011-17-2 CAPLUS

CN 1-Naphthalenamine, N-[7-(1-naphthalenyl)benzo[d][1,3]diazeto[1,2-a][1,3]benzodiazepin-6(7H)-ylidene]- (9CI) (CA INDEX NAME)

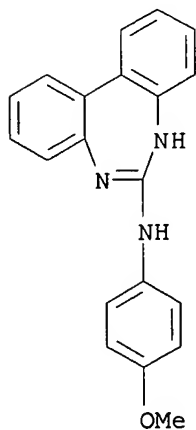




RN 221011-18-3 CAPLUS  
 CN 1,4-Benzenediamine, N'-[7-[4-(dimethylamino)phenyl]benzo[d][1,3]diazeto[1,2-a][1,3]benzodiazepin-6(7H)-ylidene]-N,N-dimethyl- (9CI) (CA INDEX NAME)



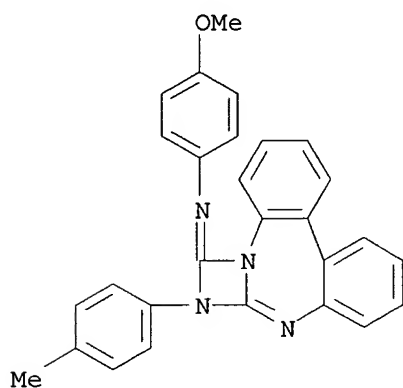
RN 221011-20-7 CAPLUS  
 CN 5H-Dibenzo[d,f][1,3]diazepin-6-amine, N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



10/019,683

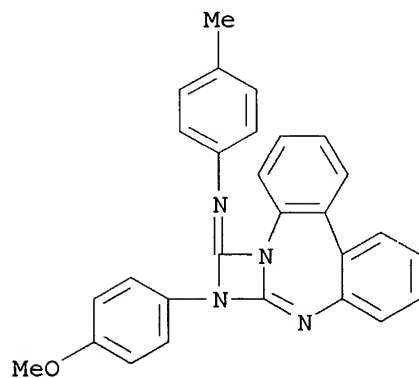
RN 221011-37-6 CAPLUS

CN Benzenamine, 4-methoxy-N-[7-(4-methylphenyl)benzo[d][1,3]diazeto[1,2-a][1,3]benzodiazepin-6(7H)-ylidene]- (9CI) (CA INDEX NAME)



RN 221011-39-8 CAPLUS

CN Benzenamine, N-[7-(4-methoxyphenyl)benzo[d][1,3]diazeto[1,2-a][1,3]benzodiazepin-6(7H)-ylidene]-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

37

THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/019,683

114 ANSWER 8 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:288578 CAPLUS

DOCUMENT NUMBER: 128:330412

TITLE: Strategies for the design of biomimetic oxoanion ionophores for ion-selective electrodes

AUTHOR(S): Ball, J. Christopher; Hutchins, Richard S.; Raposo, Cesar; Moran, Joaquin R.; Alajarin, Mateo; Molina, Pedro; Bachas, Leonidas G.

CORPORATE SOURCE: Dep. Chem., Univ. Kentucky, Lexington, KY, 40506-0055, USA

SOURCE: ACS Symposium Series (1998), 690(Polymers in Sensors), 248-256

CODEN: ACSMC8; ISSN: 0097-6156

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Biomimetic ionophores were developed for use in ion-selective electrodes (ISEs). By mimicking the strong interactions between certain biol. mols. and oxoanions, ionophores were designed that demonstrate high selectivity for particular oxoanions. Ionophores based on the guanidinium functional group and a derivatized urea group were prepared ISEs for hydrogen sulfite, salicylate, and ibuprofen based on these ionophores are described.

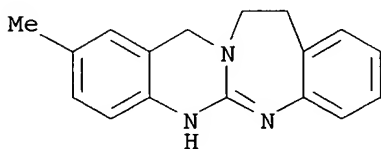
IT 206852-96-2

RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)

(hydrogen sulfite, salicylate, and ibuprofen determination by ion-selective electrodes based on biomimetic ionophores)

RN 206852-96-2 CAPLUS

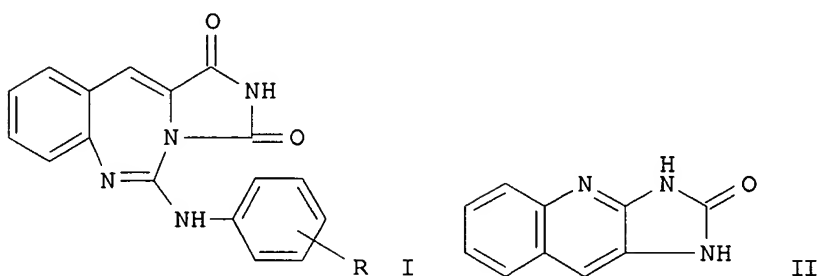
CN Quinazolino[2,3-b][1,3]benzodiazepine, 5,11,13,14-tetrahydro-9-methyl-, conjugate monoacid (9CI) (CA INDEX NAME)



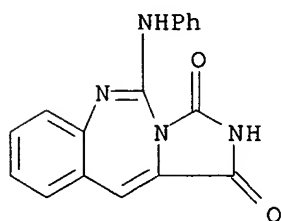
● H<sup>+</sup>

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~114~~ ANSWER 9 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:745383 CAPLUS  
 DOCUMENT NUMBER: 128:34744  
 TITLE: Synthesis of imidazo[1,5-c][1,3]benzodiazepines via an  
 aza-Wittig/carbodiimide-mediated annulation process  
 AUTHOR(S): Molina, Pedro; Tarraga, Alberto; Curiel, David;  
 Ramirez de Arellano, Carmen  
 CORPORATE SOURCE: Dep. Quim. Org., Fac. Quim., Univ. Murcia, Murcia,  
 E-30071, Spain  
 SOURCE: Tetrahedron (1997), 53(46), 15895-15902  
 CODEN: TETRAB; ISSN: 0040-4020  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



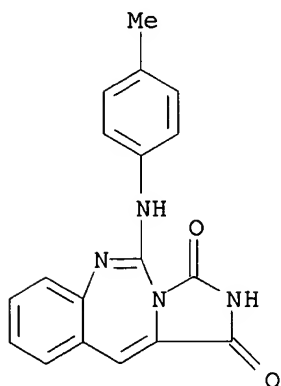
AB The first synthesis of the imidazo[1,5-c][1,3]benzodiazepine ring system, e.g., I (R = H, 4-Me, 2-Me, 4-OMe, 3-OMe, 4-Cl, 4-NO<sub>2</sub>), has been carried out by reaction of the iminophosphorane derived from the (Z)-5-(o-azidoarylidene)hydantoin with isocyanates. The isomeric (E)-tributyliminophosphorane undergoes intramol. aza Wittig reaction to give the imidazo[4,5-b]quinolin-2-one ring (II).  
 IT 199390-42-6P 199390-43-7P 199390-44-8P  
 199390-45-9P 199390-46-0P 199390-47-1P  
 199390-48-2P 199390-49-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (imidazo[1,5-c][1,3]benzodiazepines via aza-Wittig/carbodiimide-mediated annulation process)  
 RN 199390-42-6 CAPLUS  
 CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-(phenylamino)- (9CI)  
 (CA INDEX NAME)



RN 199390-43-7 CAPLUS

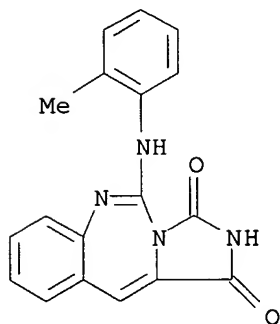
10/019,683

CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)



RN 199390-44-8 CAPLUS

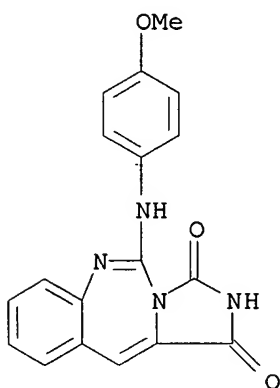
CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(2-methylphenyl)amino]- (9CI) (CA INDEX NAME)



RN 199390-45-9 CAPLUS

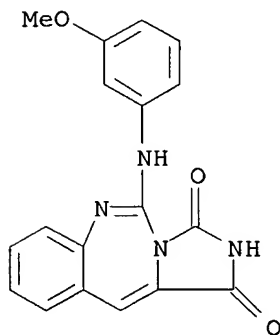
CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(4-methoxyphenyl)amino]- (9CI) (CA INDEX NAME)

10/019,683



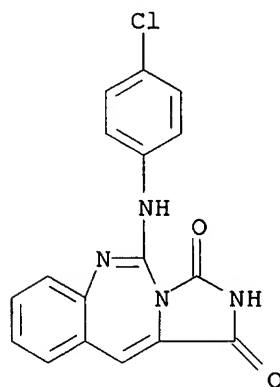
RN 199390-46-0 CAPLUS

CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(3-methoxyphenyl)amino]- (9CI) (CA INDEX NAME)



RN 199390-47-1 CAPLUS

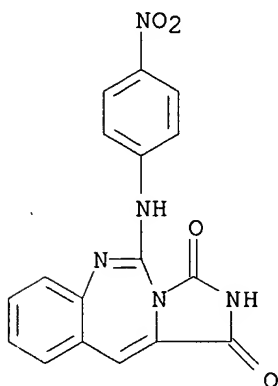
CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(4-chlorophenyl)amino]- (9CI) (CA INDEX NAME)



RN 199390-48-2 CAPLUS

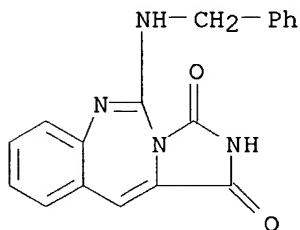
10/019,683

CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(4-nitrophenyl)amino]- (9CI) (CA INDEX NAME)



RN 199390-49-3 CAPLUS

CN 1H-Imidazo[1,5-c][1,3]benzodiazepine-1,3(2H)-dione, 5-[(phenylmethyl)amino]- (9CI) (CA INDEX NAME)



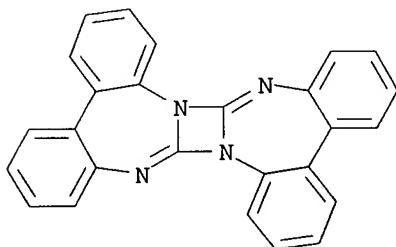
REFERENCE COUNT:

18

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~104~~ ANSWER 10 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

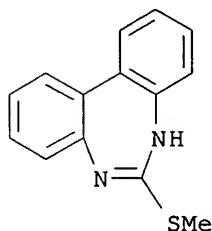
ACCESSION NUMBER: 1997:516479 CAPLUS  
DOCUMENT NUMBER: 127:190717  
TITLE: Studies of cyclic carbodiimides. X-ray crystal structure of [a,c]bis{dibenzo[d,f][1,3]-diazepino}-1,3-diazetidene  
AUTHOR(S): Alajarin, Mateo; Molina, Pedro; Sanchez-Andrada, Pilar; Foces-Foces, Concepcion  
CORPORATE SOURCE: Dep. Quimica Organica, Fac. Quimica, Univ. Murcia, Murcia, 30071, Spain  
SOURCE: Electronic Conference on Heterocyclic Chemistry, [Proceedings], June 24-July 22, 1996 (1997), Meeting Date 1996, No pp. given. Editor(s): Rzepa, Henry S.; Snyder, James P.; Leach, Christopher. Royal Society of Chemistry: Cambridge, UK.  
CODEN: 64WTAX  
DOCUMENT TYPE: Conference; (computer optical disk)  
LANGUAGE: English  
AB A conference report with no refs. The formation and mol. structure of the title compound are discussed; crystal data are not reported.  
IT 194484-24-7P  
RL: MSC (Miscellaneous); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(formation and structure of)  
RN 194484-24-7 CAPLUS  
CN Tetrabenzo[d,d',f,f'] [1,3]diazeto[1,2-a:3,4-a']bis[1,3]diazepine (9CI)  
(CA INDEX NAME)





14 ANSWER 11 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
 X  
 ACCESSION NUMBER: 1997:369740 CAPLUS  
 DOCUMENT NUMBER: 126:344564  
 TITLE: 6-Methylthio-5H-dibenzo[d,f][1,3]diazepine as additive  
 in anticorrosive coating with vinyl  
 chloride-vinylidene chloride or -vinyl acetate  
 copolymer binder and butyl acetate, toluene and  
 acetone solvents  
 INVENTOR(S): Ambartsumyan, Rafael G.; Shelepin, Oleg E.; Shelepina,  
 Viktoriya L.; Bogatyreva, Nuriya K.; Shelepin, Nikolaj  
 E.  
 PATENT ASSIGNEE(S): Filial "nauchno-Issledovatel'skaya Chast" Ao - Institut  
 "rostovskij Promstrojniiproekt", Russia; Tsentr  
 Naukoemkikh Tekhnologij Mnm "interbios"; Rostovskij  
 Gosudarstvennyj Pedagogicheskij Institut  
 SOURCE: Russ. From: Izobreteniya 1996, (36), 173.  
 CODEN: RUXXE7  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2070908	C1	19961227	RU 1994-21723	19940608
PRIORITY APPLN. INFO.:			RU 1994-21723	19940608
AB Title only translated.				
IT 2880-29-7				
RL: MOA (Modifier or additive use); USES (Uses)				
(methylthiodibenzodiazepine as additive in anticorrosive coating with vinyl chloride-vinylidene chloride or -vinyl acetate copolymer binder and Bu acetate, toluene and acetone solvents)				
RN 2880-29-7 CAPLUS				
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)- (7CI, 8CI, 9CI) (CA INDEX NAME)				



10/019,683

14 ANSWER 12 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:515955 CAPLUS

DOCUMENT NUMBER: 122:255375

TITLE: Quantitative determination and pharmacokinetics of a new antipsychotic (CGS 13429A) in human plasma using capillary gas chromatography/mass spectrometry

AUTHOR(S): Carlsen, S.; Hayes, M.; Powell, M. L.

CORPORATE SOURCE: Ciba-Geigy Corp., Ardsley, NY, 10502, USA

SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1995), 13(3), 313-18

CODEN: JPBADA; ISSN: 0731-7085

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A quant. anal. method is described for the determination of a new antipsychotic (CGS 13429A) in human plasma. The method relies on capillary gas chromatog./mass spectrometry in the pos. chemical ionization mode, utilizing ammonia reagent gas. The limit of quantification (LOQ) was 0.1 ng mL<sup>-1</sup> and the method was validated over a concentration range of 0.1-50 ng mL<sup>-1</sup>. The method was used to measure CGS 13429A plasma concns. following the administration of single oral ascending doses ranging from 0.1 to 10 mg in healthy male volunteers. The drug was rapidly absorbed (T<sub>max</sub> ranged from 1.1 to 3.7 h) and showed a mean terminal elimination half-life of 8.1 h, which was independent of dose. Area-under-the-curve (AUC) along with C<sub>max</sub> values were proportional to the administered dose.

IT 120360-10-3, CGS 13429A

RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)

(quant. determination and pharmacokinetics of the new antipsychotic CGS

13429A

in human plasma using capillary gas chromatog./mass spectrometry)

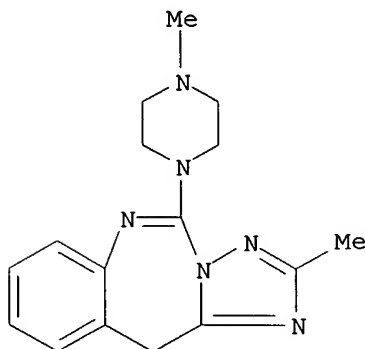
RN 120360-10-3 CAPLUS

CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 95634-82-5

CMF C16 H20 N6

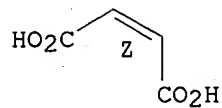


CM 2

10/019,683

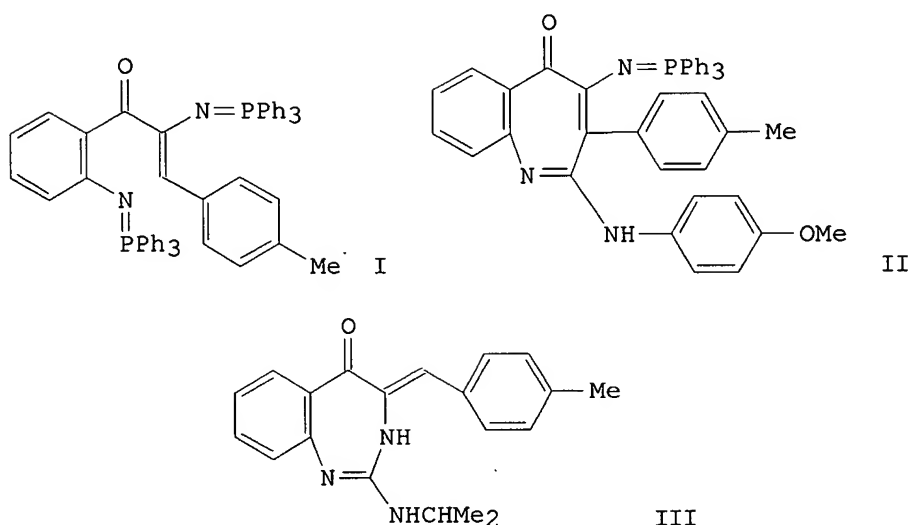
CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



10/019,683

LI4 ANSWER 13 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1994:534254 CAPLUS  
DOCUMENT NUMBER: 121:134254  
TITLE: New synthetic applications of vinyliminophosphoranes  
based on the reactivity of the vinyl side chain  
AUTHOR(S): Molina, Pedro; Aller, Enrique; Lopez-Lazaro, Antonia;  
Alajarin, Mateo; Lorenzo, Angeles  
CORPORATE SOURCE: Fac. de Quim., Univ. de Murcia, Murcia, E-30071, Spain  
SOURCE: Tetrahedron Letters (1994), 35(22), 3817-20  
CODEN: TELEAY; ISSN: 0040-4039  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 121:134254  
GI



AB New reactions of vinyliminophosphoranes involving either the  $\beta$ -carbon atom of the vinyl side chain as nucleophilic center or the  $\alpha$ -carbon as electrophilic center are described. E.g., treating vinyliminophosphorane I with RNCX (R = 4-MeOC<sub>6</sub>H<sub>4</sub>, X = S, O; R = Me<sub>2</sub>CH, X = O) gave cyclized products II or III, resp.

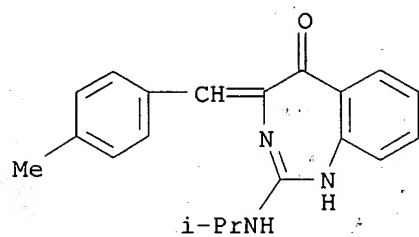
IT 157034-12-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 157034-12-3 CAPLUS

CN 5H-1,3-Benzodiazepin-5-one, 1,4-dihydro-2-[(1-methylethyl)amino]-4-[(4-methylphenyl)methylene]- (9CI) (CA INDEX NAME)

10/019,683



114 ANSWER 14 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:234023 CAPLUS

DOCUMENT NUMBER: 118:234023

TITLE: Synthetic applications of bis(iminophosphoranes).  
One-pot preparation of rigid bicyclic guanidines

AUTHOR(S): Molina, Pedro; Alajarin, Mateo; Vidal, Angel

CORPORATE SOURCE: Fac. Quim., Univ. Murcia, Murcia, E-30071, Spain

SOURCE: Journal of Organic Chemistry (1993), 58(7), 1687-95

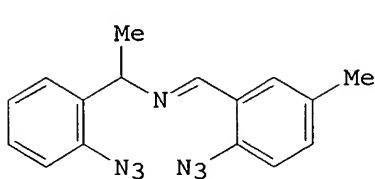
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

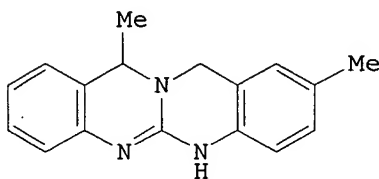
LANGUAGE: English

OTHER SOURCE(S): CASREACT 118:234023

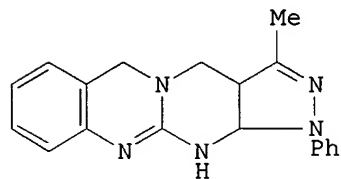
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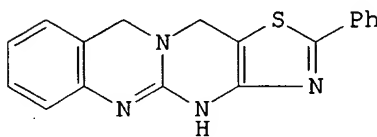
I



II



III



IV

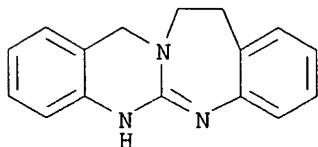
AB A one-pot synthesis of [6+6], [6+7], and [6+8] bicyclic guanidines based on a new method of dihydropyrimido annelation, which involves reaction of bis(iminophosphoranes) with aryl isocyanates or isothiocyanates is described. The method is also applicable for the preparation of chiral bicyclic guanidines. Condensation of 2-azido-5-methylbenzaldehyde with 1-(2-azidophenyl)ethylamine gave N-(2-azido-5-methylbenzylidene)- $\alpha$ -methyl-2-azidobenzylamine (I). Treatment of I with triphenylphosphine followed by treatment with sodium borohydride and 4-methylphenyl isocyanate gave the bicyclic guanidine II. Other bicyclic guanidines, such as III or IV, were prepared by a similar route.

IT 146954-34-9P 146954-35-0P 146954-36-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, from bis(iminophosphorane) derivative)

RN 146954-34-9 CAPLUS

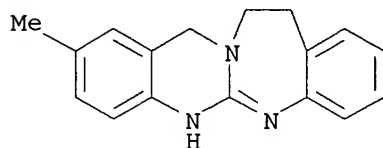
CN Quinazolino[2,3-b][1,3]benzodiazepine, 5,11,13,14-tetrahydro- (9CI) (CA INDEX NAME)



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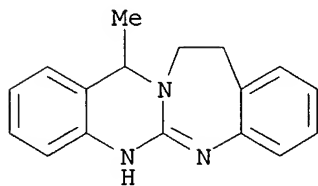
RN 146954-35-0 CAPLUS

CN Quinazolino[2,3-b][1,3]benzodiazepine, 5,11,13,14-tetrahydro-9-methyl-  
(9CI) (CA INDEX NAME)



RN 146954-36-1 CAPLUS

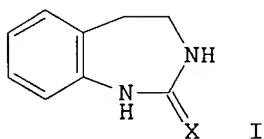
CN Quinazolino[2,3-b][1,3]benzodiazepine, 5,11,13,14-tetrahydro-11-methyl-  
(9CI) (CA INDEX NAME)



L14 ANSWER 15 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:448620 CAPLUS  
 DOCUMENT NUMBER: 117:48620  
 TITLE: Preparation of 2-substituted hydrogenated  
 1,3-benzodiazepines  
 INVENTOR(S): Spindler, Juergen; Kempter, Gerhard; Peseke, Klaus;  
 Kleinpeter, Erich  
 PATENT ASSIGNEE(S): Paedagogische Hochschule Potsdam, Germany  
 SOURCE: Ger. (East), 4 pp.  
 CODEN: GEXXA8  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DD 294714	A5	19911010	DD 1990-341027	19900528
PRIORITY APPLN. INFO.:			DD 1990-341027	19900528
OTHER SOURCE(S):	CASREACT 117:48620			
GI				

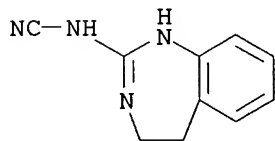


AB Title compds. I [X = C(CN)<sub>2</sub>, C(CN)CO<sub>2</sub>Et, NCN, NSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Me-4] were obtained in 43-69% yield by treating 2-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> with X:C(SMe)<sub>2</sub>.

IT 137155-02-3P 137155-06-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 137155-02-3 CAPLUS

CN Cyanamide, (4,5-dihydro-1H-1,3-benzodiazepin-2-yl)- (9CI) (CA INDEX NAME)

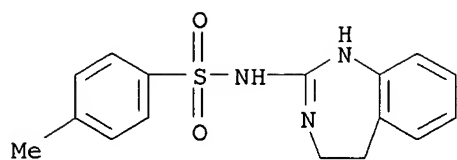


RN 137155-06-7 CAPLUS

CN Benzenesulfonamide, N-(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)-4-methyl- (9CI) (CA INDEX NAME)



10/019,683



L14 ANSWER 16 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:632171 CAPLUS

DOCUMENT NUMBER: 115:232171

TITLE: Substituted quinazolines and benzodiazepines from 1,3- and 1,4-diamines

AUTHOR(S): Spindler, Juergen

CORPORATE SOURCE: Inst. Org. Chem., Univ. Potsdam, Potsdam, O-1571, Germany

SOURCE: Chemiker-Zeitung (1991), 115(7-8), 224-5

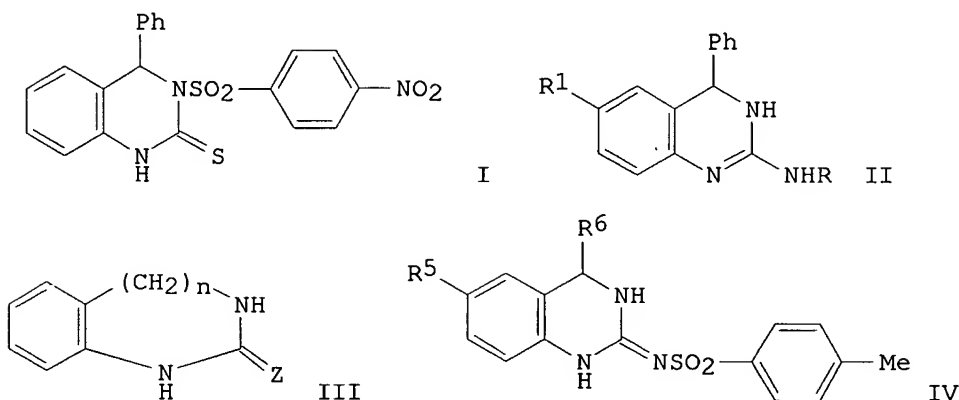
CODEN: CMKZAT; ISSN: 0009-2894

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 115:232171

GI



AB Title compds. I, II [ $R = N:C(CO_2Me)CH_2CO_2Me$ ,  $R_1 = H, Cl, Me$ ;  $R = NHSO_2C_6H_2R_2-3-R_3-4-R_4-5$ ,  $R_1 = H, Cl$ ,  $R_2 = R_4 = H$ ,  $R_3 = Me, Br, NO_2$ ], III [ $n = 1, 2$ ,  $Z = C(CN)_2, C(CN)CO_2Et, NCN, NSO_2C_6H_4Me-p$ ], and IV ( $R_5 = H$ ,  $R_6 = Me, Ph$ ;  $R_5 = Cl$ ,  $R_6 = Ph$ ) were prepared by the following methods. Cyclization of 2-(4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NHCHPh)C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> with CS<sub>2</sub> gave I. Reactions of II ( $R = NH_2$ ) with MeO<sub>2</sub>C-C.tplbond.C-CO<sub>2</sub>Me or 3-R<sub>2</sub>-4-R<sub>3</sub>-5-R<sub>4</sub>C<sub>6</sub>H<sub>2</sub>SO<sub>2</sub>Cl gave II [ $R = N:C(CO_2Me)CH_2CO_2Me$ ;  $NHSO_2C_6H_2R_2-3-R_3-4-R_4-5$ , resp.]. Cyclocondensation of 2-(NH<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>)C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> with (MeS)<sub>2</sub>C:Z gave III. IV was prepared from p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>N:C(SMe)<sub>2</sub> and 2-R<sub>6</sub>CH(NH<sub>2</sub>)-3-R<sub>5</sub>C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub>.

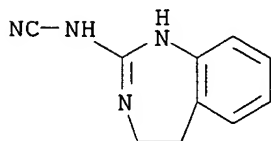
IT 137155-02-3P 137155-06-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, via cyclocondensation of (aminoethyl)aniline with bis(methylthio)methylene compds.)

RN 137155-02-3 CAPLUS

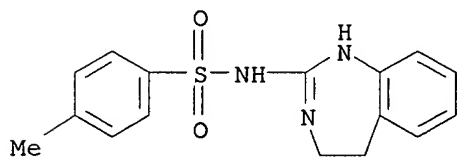
CN Cyanamide, (4,5-dihydro-1H-1,3-benzodiazepin-2-yl)- (9CI) (CA INDEX NAME)



10/019,683

RN 137155-06-7 CAPLUS

CN Benzenesulfonamide, N-(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)-4-methyl-  
(9CI) (CA INDEX NAME)



114 ANSWER 17 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:622717 CAPLUS

DOCUMENT NUMBER: 115:222717

TITLE: Determination of in vivo hepatic extraction ratio from in vitro metabolism by rat hepatocytes

AUTHOR(S): Singh, Kuldeep; Tripp, Spencer L.; Dunton, Alan W.; Douglas, Frank L.; Rakhit, Ashok

CORPORATE SOURCE: Res. Dep., Ciba-Geigy Corp., Summit, NJ, 07901, USA

SOURCE: Drug Metabolism and Disposition (1991), 19(5), 990-6

CODEN: DMDSAI; ISSN: 0090-9556

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Using isolated rat hepatocytes, the in vitro intrinsic hepatic clearance of three drugs, namely, antipyrine (AP), propranolol (P), and CGS 13429 was determined. The hepatic extraction ratios of AP, P, and CGS 13429 were then calculated to be 0.10, 0.90, and 0.88, resp. To determine the in vivo hepatic extraction ratio in the rat, AP, P, or CGS 13429 was infused sep. at a rate of 40, 20, and 20 µg/min.kg, via jugular and hepatic portal veins. The steady state plasma levels of AP, P, and CGS 13429 were 5.30 µg/mL, 608 and 380 ng/mL after jugular vein (i.v.) infusions, and 4.96 µg/mL, 162, and 146 ng/mL after hepatic portal vein (hvp) infusions, resp. The blood to plasma ratios of AP, P, and CGS 13429 were 1.0, 0.78, and 1.0, resp. The in vivo hepatic extraction ratio, calculated as  $(C_{ss,iv} - C_{ss,hpv})/C_{ss,iv}$  from

steady state blood levels following i.v. and hvp infusions for AP, P, and CGS 13429, were 0.065, 0.73, and 0.61, resp. These results suggest that in vitro metabolism studies by hepatocytes may have potential application, during drug discovery, to distinguish drugs of low and high metabolic hepatic extraction ratio in vivo.

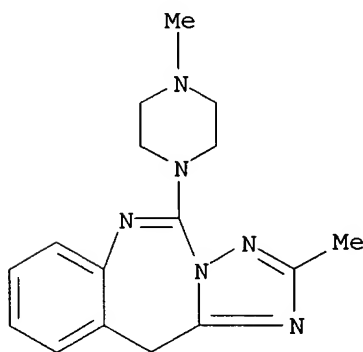
IT 95634-82-5, CGS 13429

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(metabolism of, by hepatocytes, liver extraction ratio determination from)

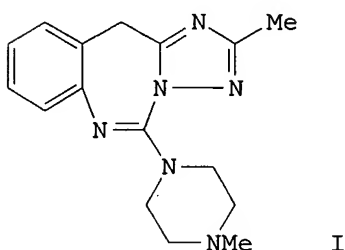
RN 95634-82-5 CAPLUS

CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

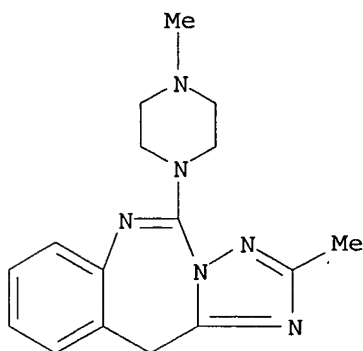


~~114~~ ANSWER 18 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

~~ACCESSION NUMBER:~~ 1990:95 CAPLUS  
~~DOCUMENT NUMBER:~~ 112:95  
~~TITLE:~~ High-performance liquid chromatographic method for a  
 clozapine analog, CGS 13429, and its N-oxide and  
 demethyl metabolites  
~~AUTHOR(S):~~ Chovan, James P.; Vermeulen, Jeannette D.  
~~CORPORATE SOURCE:~~ Pharm. Div., Ciba-Geigy Corp., Ardsley, NY, 10502, USA  
~~SOURCE:~~ Journal of Chromatography (1989), 494, 413-19  
 CODEN: JOCRAM; ISSN: 0021-9673  
~~DOCUMENT TYPE:~~ Journal  
~~LANGUAGE:~~ English  
 GI

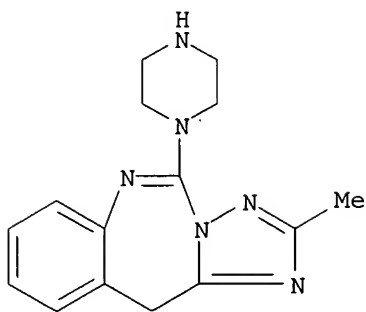


AB An HPLC method for preclin. pharmacokinetic and bioavailability studies to  
 quantify a clozapine analog, CGS 13429 (I), and its N-dimethyl and N-oxide  
 metabolite is described. The limit of detection was 40 ng/mL for 200  
 µL of rat or dog plasma for all 3 compds. The clozapine analog CGS  
 11760 was used as internal standard  
 IT 95634-82-5, CGS 13429 124027-45-8 124027-46-9  
 RL: ANT (Analyte); ANST (Analytical study)  
 (determination of, in blood by HPLC)  
 RN 95634-82-5 CAPLUS  
 CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-  
 piperazinyl)- (9CI) (CA INDEX NAME)



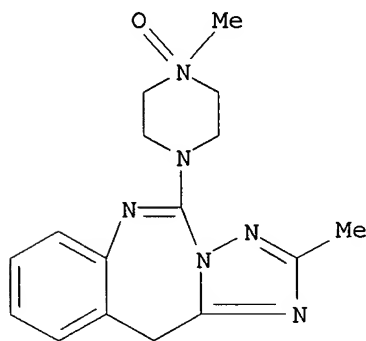
RN 124027-45-8 CAPLUS  
 CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(1-piperazinyl)-  
 (9CI) (CA INDEX NAME)

10/019,683



RN 124027-46-9 CAPLUS

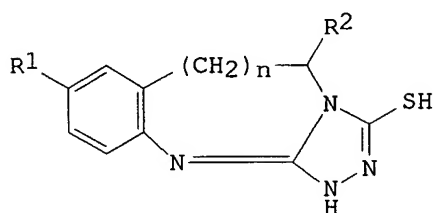
CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-4-oxido-1-piperazinyl)- (9CI) (CA INDEX NAME)



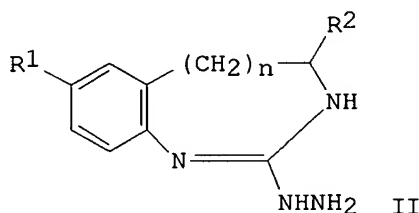
L14 ANSWER 19 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1989:594805 CAPLUS  
 DOCUMENT NUMBER: 111:194805  
 TITLE: Preparation of 1,2,4-triazolobenzo-1,3-diazacycloheptanes and -octanes  
 INVENTOR(S): Spindler, Juergen; Kempter, Gerhard; Schroeder, Christine  
 PATENT ASSIGNEE(S): Paedagogische Hochschule Potsdam, Ger. Dem. Rep.  
 SOURCE: Ger. (East), 3 pp.  
 CODEN: GEXXA8  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 265897	A1	19890315	DD 1987-308779	19870727
PRIORITY APPLN. INFO.:			DD 1987-308779	19870727
OTHER SOURCE(S):	MARPAT	111:194805		

GI

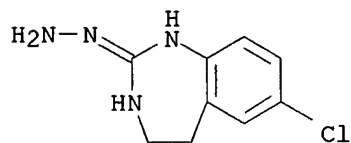


I



II

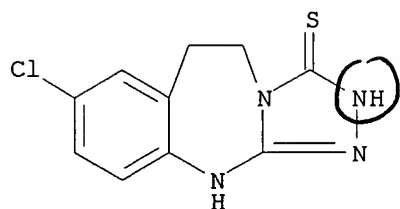
AB The title compds. (I; R1 = H, Cl; R2 = H, Ph; n = 1,2) were prepared by cyclocondensation of hydrazino derivative II with CS2. Thus, II (R1 = Cl, R1 = H, n = 1) was refluxed 6 h with a 5-fold excess of CS2 in MeOH-EtOH containing KOH to give 73% I (R1, R2, n as above).  
 IT 120075-93-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclocondensation of, with carbon disulfide)  
 RN 120075-93-6 CAPLUS  
 CN 2H-1,3-Benzodiazepin-2-one, 7-chloro-1,3,4,5-tetrahydro-, hydrazone (9CI)  
 (CA INDEX NAME)



IT 123403-58-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 123403-58-7 CAPLUS  
 CN 3H-1,2,4-Triazolo[3,4-b][1,3]benzodiazepine-3-thione, 8-chloro-1,2,5,6-

10/019,683

tetrahydro- (9CI) (CA INDEX NAME)





L14 ANSWER 20 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:173269 CAPLUS

DOCUMENT NUMBER: 110:173269

TITLE: Dihydroquinazolines, dihydrobenzodiazepines and tetrahydrobenzodiazocines as intermediates for bioactive compounds

INVENTOR(S): Spindler, Juergen; Kempster, Gerhard; Schroeder, Christine; Jumar, Alfred

PATENT ASSIGNEE(S): VEB Fahlberg-List, Ger. Dem. Rep.

SOURCE: Ger. (East), 4 pp.

CODEN: GEXXA8

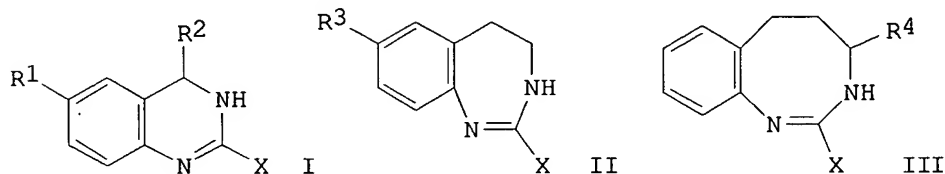
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 258810	A1	19880803	DD 1987-300969	19870320
PRIORITY APPLN. INFO.:			DD 1987-300969	19870320
OTHER SOURCE(S):	MARPAT 110:173269			
GI				

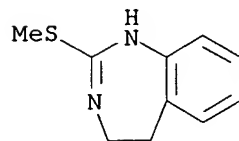


AB The title compds. (I, II, and III; R1, R3 = halo; R2, R4 = alkyl, aryl; X = NHNH2), useful as intermediates for potentially bioactive compds., were prepared from the hydroiodide salts of the corresponding compds. I, II, and III (X = SMe) by reaction with N2H4. 4-Methyl-2-methylthio-3,4-dihydroquinazoline.HI was refluxed 45 min in 25% aqueous N2H4 to give 85% 2-hydrazino-4-methyl-3,4-dihydroquinazoline.

IT 52063-46-4 97844-45-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(hydrazinolysis of)

RN 52063-46-4 CAPLUS

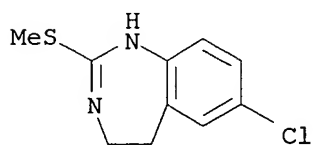
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-, monohydriodide (9CI)  
(CA INDEX NAME)

● HI

10/019,683

RN 97844-45-6 CAPLUS

CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



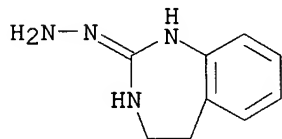
● HI

IT 120075-92-5P 120075-93-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as intermediate for bioactive compds.)

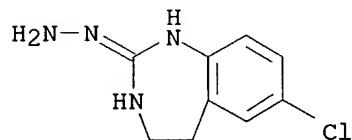
RN 120075-92-5 CAPLUS

CN 2H-1,3-Benzodiazepin-2-one, 1,3,4,5-tetrahydro-, hydrazone (9CI) (CA  
INDEX NAME)



RN 120075-93-6 CAPLUS

CN 2H-1,3-Benzodiazepin-2-one, 7-chloro-1,3,4,5-tetrahydro-, hydrazone (9CI)  
(CA INDEX NAME)



L14 ANSWER 21 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:493053 CAPLUS

DOCUMENT NUMBER: 109:93053

TITLE: Preparation of 2-heterocyclyl-3,4-dihydroquinazolines,  
-4,5-dihydro-3H-1,3-benzodiazepines, and  
-3,4,5,6-tetrahydro-1,3-benzodiazocines

INVENTOR(S): Spindler, Juergen; Kempster, Gerhard; Kuehne, Sabine

PATENT ASSIGNEE(S): VEB Fahlberg-List, Ger. Dem. Rep.

SOURCE: Ger. (East), 5 pp.

CODEN: GEXXA8

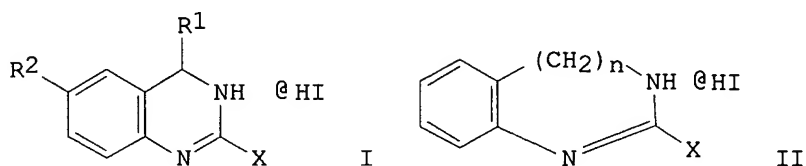
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 251977	A1	19871202	DD 1986-293593	19860812
PRIORITY APPLN. INFO.:			DD 1986-293593	19860812
OTHER SOURCE(S):	CASREACT 109:93053			
GI				



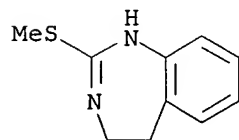
AB The title compds. (I and II; X = heterocyclic secondary amino, e.g., morpholino, pyrrolidino; R1, R2 = alkyl, aryl, halo; n = 2, 3) were prepared as intermediates for bioactive compds. 2-Methylthio-3,4-dihydroquinazoline-HI, morpholine, and HI were refluxed 10 h in EtOH to give 76% 2-morpholino-3,4-dihydroquinazoline-HI.

IT 52063-46-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
(amination of, by morpholine)

RN 52063-46-4 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-, monohydriodide (9CI)  
(CA INDEX NAME)



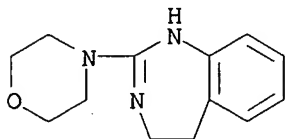
● HI

IT 115787-40-1P 115787-41-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

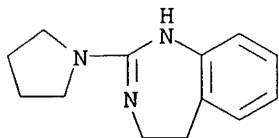
10/019,683

(preparation of)  
RN 115787-40-1 CAPLUS  
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(4-morpholinyl)-, monohydriodide  
(9CI) (CA INDEX NAME)



● HI

RN 115787-41-2 CAPLUS  
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(1-pyrrolidinyl)-, monohydriodide  
(9CI) (CA INDEX NAME)



● HI

L14 ANSWER 22 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:493052 CAPLUS

DOCUMENT NUMBER: 109:93052

TITLE: Preparation of 2-methylthioquinazolines,  
-benzodiazepines, and -benzodiazocines as  
intermediates for biological active compounds

INVENTOR(S): Spindler, Juergen; Kempster, Gerhard; Heinemann,  
Birgit; Jumar, Alfred

PATENT ASSIGNEE(S): VEB Fahlberg-List, Ger. Dem. Rep.

SOURCE: Ger. (East), 4 pp.

CODEN: GEXXA8

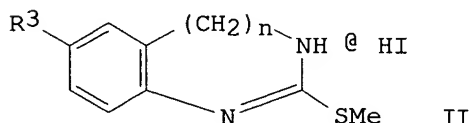
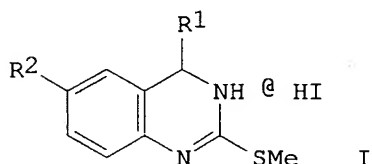
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 251974	A1	19871202	DD 1986-293592	19860812
PRIORITY APPLN. INFO.: GI			DD 1986-293592	19860812



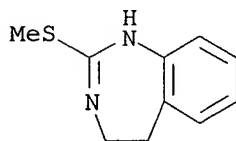
AB The title compds. (I and II; R1,R2,R3 = alkyl, aryl, halo), were prepared by cyclocondensation of CS2 with the corresponding diamines followed by treatment of the unisolated thione intermediates with MeI. 2-Aminobenzylamine and CS2 were kept in EtOH at room temperature for 1 day and then refluxed 3 h to give 55% 3,4-dihydro-1H-quinazoline-2-thione, which was refluxed with MeI in MeOH/EtOH to give 51% 2-methylthio-3,4-dihydroquinazoline-HI (based on starting amine).

IT 52063-46-4P 115724-99-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 52063-46-4 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-, monohydriodide (9CI)  
(CA INDEX NAME)

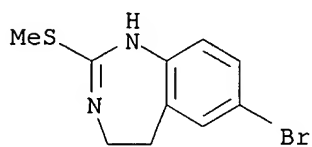


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RN 115724-99-7 CAPLUS

CN 1H-1,3-Benzodiazepine, 7-bromo-4,5-dihydro-2-(methylthio)-, monohydriodide  
(9CI) (CA INDEX NAME)



● HI

L14 ANSWER 23 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:598289 CAPLUS

DOCUMENT NUMBER: 107:198289

TITLE: Reaction of cyclic N,N'-disubstituted thioureas with carbonyl activated dielectrophiles

AUTHOR(S): Spindler, Juergen; Kempster, Gerhard

CORPORATE SOURCE: Sekt. Chem./Biol., Paedagog. Hochsch. "Karl Liebknecht", Potsdam, DDR-1500, Ger. Dem. Rep.

SOURCE: Zeitschrift fuer Chemie (1987), 27(1), 36-7

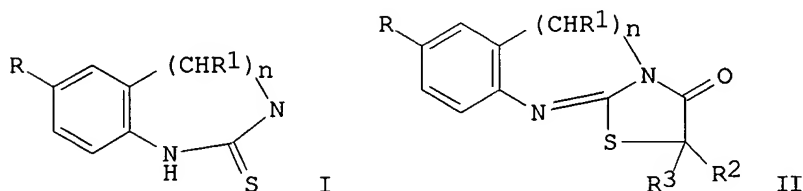
CODEN: ZECEAL; ISSN: 0044-2402

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 107:198289

GI

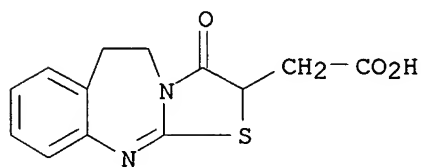


AB The reaction of cyclic thioureas I (R = H, Cl; R<sub>1</sub> = Me, Ph; n = 1; R = R<sub>1</sub> = H; n = 2, 3) with BrCH<sub>2</sub>CO<sub>2</sub>Et, MeO<sub>2</sub>CC.tplbond.CCO<sub>2</sub>Me and maleic anhydride gave condensed thiazolones II (R<sub>2</sub> = H, CH<sub>2</sub>CO<sub>2</sub>H, R<sub>3</sub> = H; R<sub>2</sub>R<sub>3</sub> = methoxycarbonylmethylene).

IT 111039-32-8P 111039-33-9P

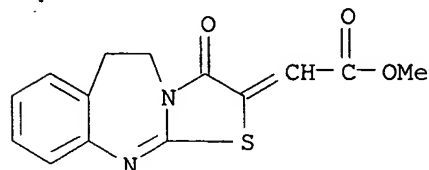
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 111039-32-8 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine-2-acetic acid, 2,3,5,6-tetrahydro-3-oxo-  
(9CI) (CA INDEX NAME)

RN 111039-33-9 CAPLUS

CN Acetic acid, (5,6-dihydro-3-oxothiazolo[2,3-b][1,3]benzodiazepin-2(3H)-ylidene)-, methyl ester (9CI) (CA INDEX NAME)



DI4 ANSWER 24 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:19542 CAPLUS

DOCUMENT NUMBER: 104:19542

TITLE: Photochemical formation of methylenecyclopropane analogs. 11. Photochemical elimination of nitrogen from phenyl-substituted 1,4-dihydro-5-imino-5H-tetrazoles. Products of phenyl-substituted tris(imino)methane diradicals

AUTHOR(S): Quast, Helmut; Fuss, Andreas; Nahr, Uwe

CORPORATE SOURCE: Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Fed. Rep. Ger.

SOURCE: Chemische Berichte (1985), 118(6), 2164-85

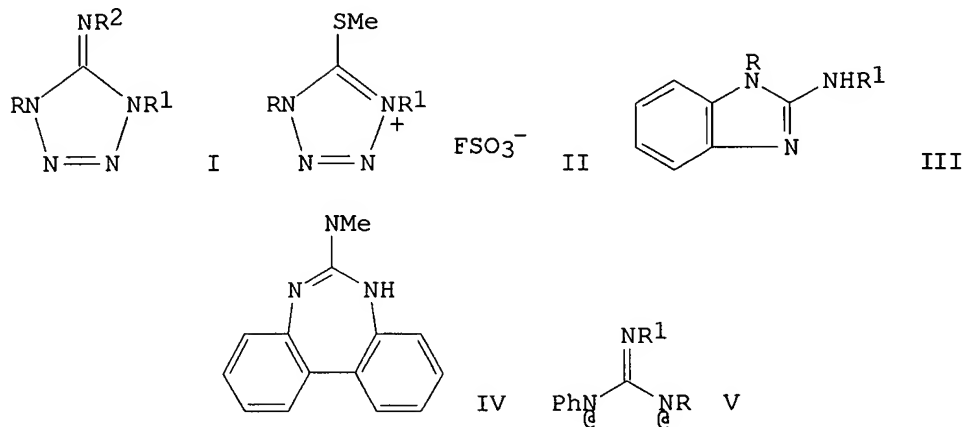
CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 104:19542

GI



AB The title iminotriazoles (I; R = R1 = Me, R2 = Ph; R = Ph, R1 = Me, R2 = Me, Ph; R = R1 = Ph, R2 = Me), prepared by reaction of (methylthio)thiazolium compds. II with R2NH2, underwent photolysis with elimination of mol. N to give chiefly 2-aminobenzimidazoles III plus PhNHC(:NR)NHR1 and aminodibenzodiazepine IV (where 2 of R-R2 = Ph). Photolysis of I (R = Ph, R1 = Me, R2 = CD3, C6D5) led to scrambling of the D among the possible positions giving, e.g., equal amts. of II (R = CD3, R1 = Me; R = Me, R1 = CD3), demonstrating the equivalence of N atoms N-1, N-4, and the exocyclic N with respect to product formation. Tris(imino)methane diradicals V are postulated as intermediates in the photochem. process.

IT 2849-05-0P 97990-14-2P

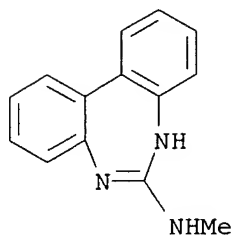
RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, in photolysis of iminotetrazole derivative)

RN 2849-05-0 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepin-6-amine, N-methyl- (9CI) (CA INDEX NAME)

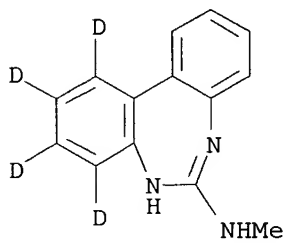


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RN 97990-14-2 CAPLUS

CN 5H-Dibenzo[d, f][1, 3]diazepin-1, 2, 3, 4-d4-6-amine, N-methyl- (9CI) (CA  
INDEX NAME)



L14 ANSWER 25 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:505012 CAPLUS

DOCUMENT NUMBER: 103:105012

TITLE: Imidazo acid and pyrimido [2,1-b]-1,3-benzodiazepines  
and their use as antidepressants

INVENTOR(S): Ferrand, Gerard; Depin, Jean Claude

PATENT ASSIGNEE(S): LIPHA, Lyonnaise Industrielle Pharmaceutique, Fr.

SOURCE: Fr. Demande, 23 pp.

CODEN: FRXXBL

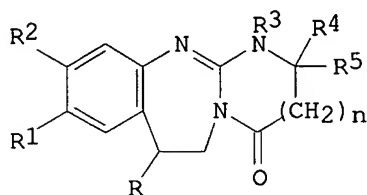
DOCUMENT TYPE: Patent

LANGUAGE: French

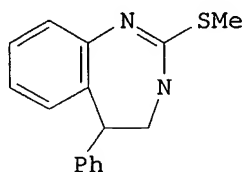
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2550199	A1	19850208	FR 1983-12703	19830802
FR 2550199	B1	19851129		
PRIORITY APPLN. INFO.:			FR 1983-12703	19830802
OTHER SOURCE(S):		CASREACT 103:105012; MARPAT 103:105012		
GI				



I



II

AB Title compds. I ( $n = 0, 1$ ;  $R = H, Me, Ph, \text{halo-}, \text{alkyl-}, \text{or alkoxyphenyl}$ ;  $R_1 = H, \text{halo}, \text{alkyl}, \text{alkoxy}$ ;  $R_2 = H, OMe$ ;  $R_3 = H, \text{alkyl}, \text{carbalkoxy}$ ;  $R_4 = H, Me, Ph$ ;  $R_5 = H, Me$ ), which were prepared, exhibited antidepressant activity. A mixture of benzodiazepine derivative II and  $H_2NCH_2CO_2Et$  in MeCN

was

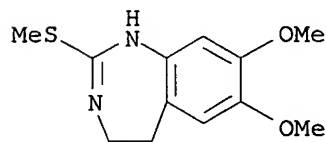
stirred at room temperature to give I ( $n = 0, R = Ph, R_1 = R_2 = R_3 = R_4 = R_5 = H$ ).

IT 37852-20-3 97866-87-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(a cyclic condensation of, with glycinate ester)

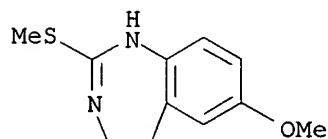
RN 37852-20-3 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)

● HI

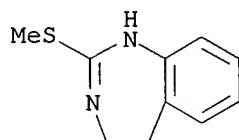
10/019,683

RN 97866-87-0 CAPLUS  
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7-methoxy-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



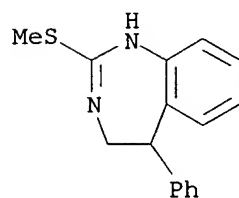
● HI

IT 52063-46-4 90141-77-8 97844-45-6  
97844-59-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclic condensation of, with amino acid esters)  
RN 52063-46-4 CAPLUS  
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-, monohydriodide (9CI)  
(CA INDEX NAME)



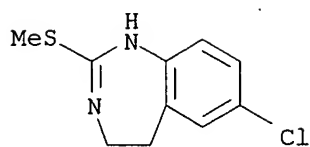
● HI

RN 90141-77-8 CAPLUS  
CN 3H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-5-phenyl-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

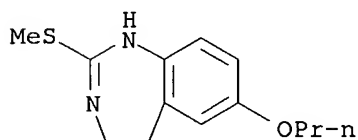
RN 97844-45-6 CAPLUS  
CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 97844-59-2 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-7-propoxy-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

IT 90156-43-7 90156-45-9 94568-07-7

94568-09-9 94568-11-3 94568-13-5

97844-62-7 97844-94-5 97844-97-8

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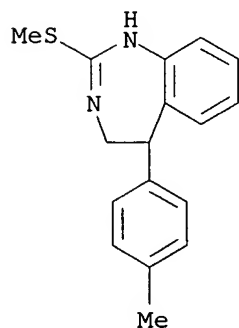
97845-11-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclic condensation of, with glycinate ester)

RN 90156-43-7 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(4-methylphenyl)-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)

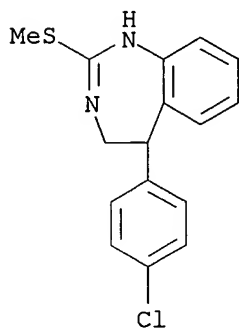


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RN 90156-45-9 CAPLUS

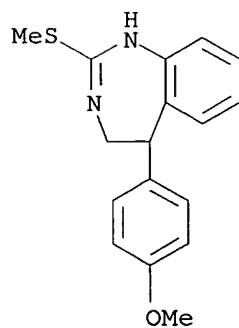
CN 1H-1,3-Benzodiazepine, 5-(4-chlorophenyl)-4,5-dihydro-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 94568-07-7 CAPLUS

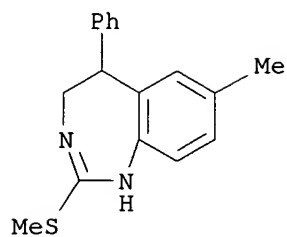
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(4-methoxyphenyl)-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 94568-09-9 CAPLUS

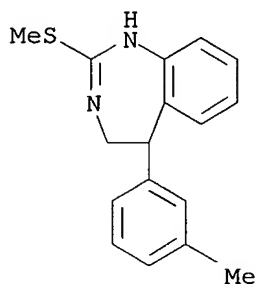
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7-methyl-2-(methylthio)-5-phenyl-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 94568-11-3 CAPLUS

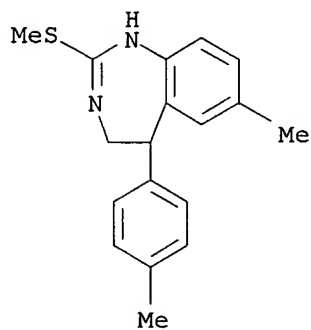
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(3-methylphenyl)-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 94568-13-5 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7-methyl-5-(4-methylphenyl)-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)

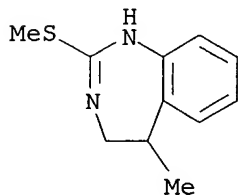


● HI

10/019,683

RN 97844-62-7 CAPLUS

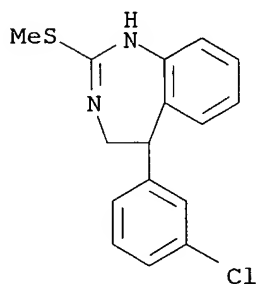
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-methyl-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 97844-94-5 CAPLUS

CN 1H-1,3-Benzodiazepine, 5-(3-chlorophenyl)-4,5-dihydro-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)

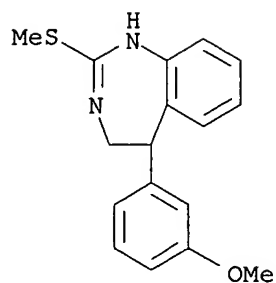


● HI

RN 97844-97-8 CAPLUS

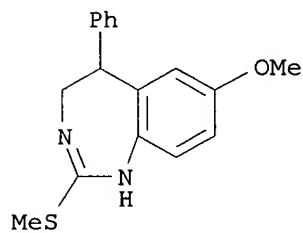
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(3-methoxyphenyl)-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)

10/019,683



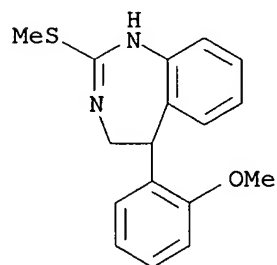
● HI

RN 97845-00-6 CAPLUS  
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7-methoxy-2-(methylthio)-5-phenyl-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 97845-03-9 CAPLUS  
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(2-methoxyphenyl)-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



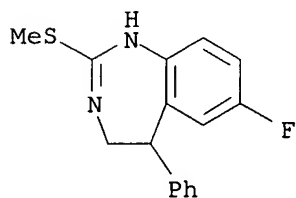
● HI

RN 97845-08-4 CAPLUS



10/019,683

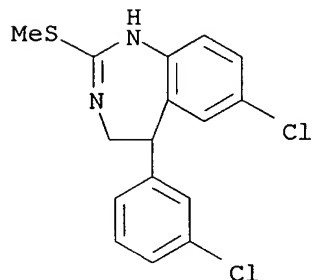
CN 1H-1,3-Benzodiazepine, 7-fluoro-4,5-dihydro-2-(methylthio)-5-phenyl-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 97845-11-9 CAPLUS

CN 1H-1,3-Benzodiazepine, 7-chloro-5-(3-chlorophenyl)-4,5-dihydro-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)



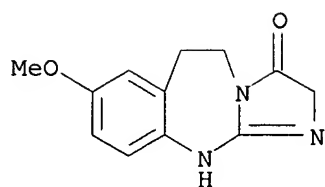
● HI

IT 97844-55-8P 97844-58-1P 97844-84-3P  
97844-93-4P 97844-96-7P 97845-07-3P  
97845-10-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation and antidepressant activity of)

RN 97844-55-8 CAPLUS

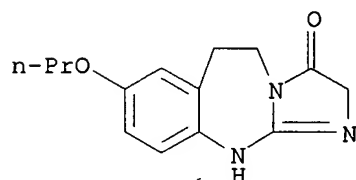
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8-methoxy-, monohydrochloride (9CI) (CA INDEX NAME)



Ex. 28

● HCl

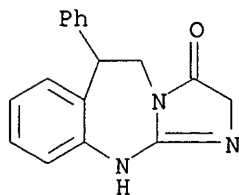
RN 97844-58-1 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8-propoxy-, monohydrochloride (9CI) (CA INDEX NAME)



Ex. 30

● HCl

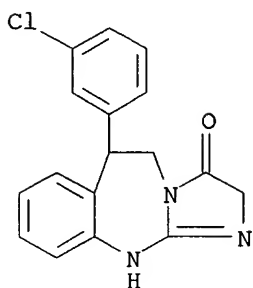
RN 97844-84-3 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



Ex 1

● HCl

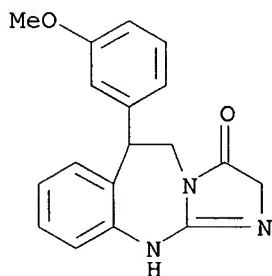
RN 97844-93-4 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 6-(3-chlorophenyl)-1,2,5,6-tetrahydro-, monohydrochloride (9CI) (CA INDEX NAME)



Ex. 7

● HCl

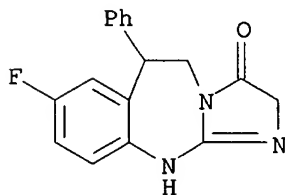
RN 97844-96-7 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(3-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



Ex. 9

● HCl

RN 97845-07-3 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 8-fluoro-1,2,5,6-tetrahydro-6-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

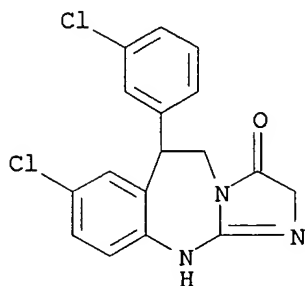


Ex. 13

● HCl

RN 97845-10-8 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 8-chloro-6-(3-chlorophenyl)-

1,2,5,6-tetrahydro-, monohydrochloride (9CI) (CA INDEX NAME)



Ex 14

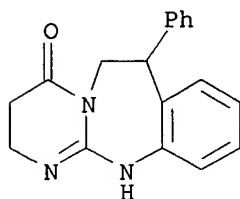
● HCl

IT 97844-36-5P 97844-37-6P 97844-38-7P  
 97844-39-8P 97844-42-3P 97844-43-4P  
 97844-44-5P 97844-46-7P 97844-48-9P  
 97844-49-0P 97844-50-3P 97844-51-4P  
 97844-52-5P 97844-53-6P 97844-54-7P  
 97844-56-9P 97844-57-0P 97844-60-5P  
 97844-61-6P 97844-63-8P 97844-85-4P  
 97844-86-5P 97844-87-6P 97844-88-7P  
 97844-89-8P 97844-90-1P 97844-91-2P  
 97844-92-3P 97844-95-6P 97844-98-9P  
 97844-99-0P 97845-01-7P 97845-02-8P  
 97845-04-0P 97845-05-1P 97845-06-2P  
 97845-09-5P 97845-12-0P 97866-88-1P  
 97906-26-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 97844-36-5 CAPLUS

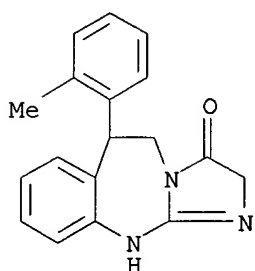
CN Pyrimido[2,1-b][1,3]benzodiazepin-4(1H)-one, 2,3,6,7-tetrahydro-7-phenyl-  
 (9CI) (CA INDEX NAME)



Ex 15

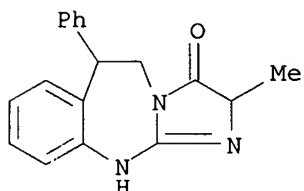
RN 97844-37-6 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(2-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



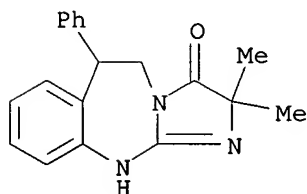
● HCl

RN 97844-38-7 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-2-methyl-6-phenyl-, (2S-cis)- (9CI) (CA INDEX NAME)



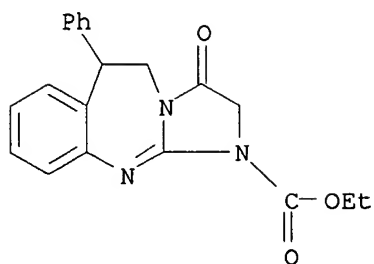
Ex. 16

RN 97844-39-8 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-2,2-dimethyl-6-phenyl- (9CI) (CA INDEX NAME)



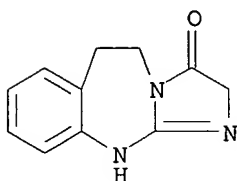
Ex 17

RN 97844-42-3 CAPLUS  
CN 1H-Imidazo[2,1-b][1,3]benzodiazepine-1-carboxylic acid, 2,3,5,6-tetrahydro-3-oxo-6-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



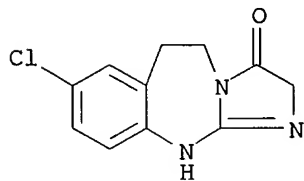
Ex. 18

RN 97844-43-4 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro- (9CI) (CA INDEX NAME)



Ex 19

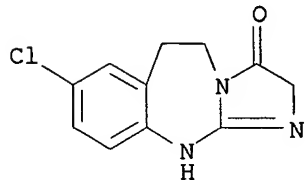
RN 97844-44-5 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 8-chloro-1,2,5,6-tetrahydro-, monohydrochloride (9CI) (CA INDEX NAME)



Ex. 20

● HCl

RN 97844-46-7 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 8-chloro-1,2,5,6-tetrahydro- (9CI) (CA INDEX NAME)

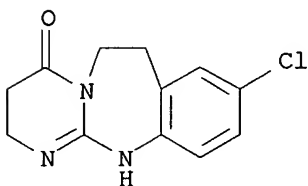


Ex. 21  
22

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RN 97844-48-9 CAPLUS

CN Pyrimido[2,1-b][1,3]benzodiazepin-4(1H)-one, 9-chloro-2,3,6,7-tetrahydro-,  
monohydrochloride (9CI) (CA INDEX NAME)

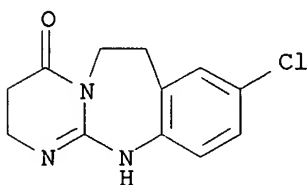


Ex. 23

● HCl

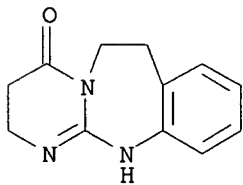
RN 97844-49-0 CAPLUS

CN Pyrimido[2,1-b][1,3]benzodiazepin-4(1H)-one, 9-chloro-2,3,6,7-tetrahydro-  
(9CI) (CA INDEX NAME)



RN 97844-50-3 CAPLUS

CN Pyrimido[2,1-b][1,3]benzodiazepin-4(1H)-one, 2,3,6,7-tetrahydro-,  
monohydrochloride (9CI) (CA INDEX NAME)

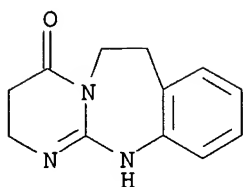


Ex. 24

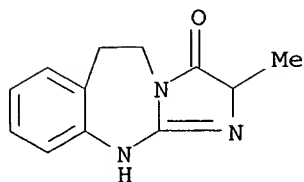
● HCl

RN 97844-51-4 CAPLUS

CN Pyrimido[2,1-b][1,3]benzodiazepin-4(1H)-one, 2,3,6,7-tetrahydro- (9CI)  
(CA INDEX NAME)

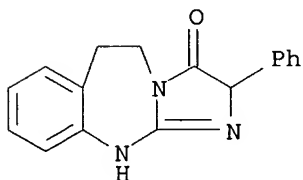


RN 97844-52-5 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-2-methyl-  
(9CI) (CA INDEX NAME)



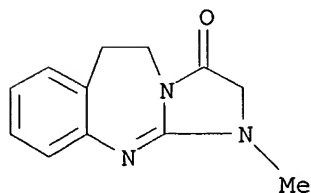
Ex. 25

RN 97844-53-6 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-2-phenyl-  
(9CI) (CA INDEX NAME)



Ex. 26

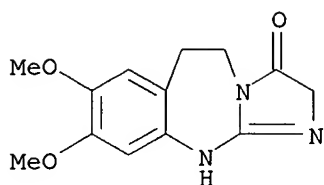
RN 97844-54-7 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-1-methyl-  
(9CI) (CA INDEX NAME)



Ex. 27

RN 97844-56-9 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8,9-  
dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)

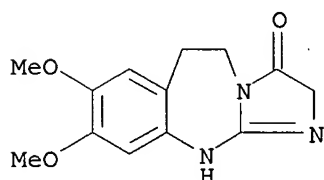




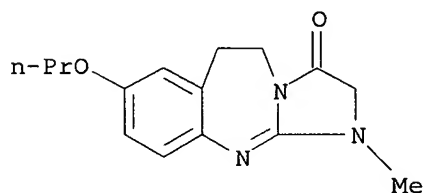
Ex. 29

● HCl

RN 97844-57-0 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8,9-dimethoxy- (9CI) (CA INDEX NAME)

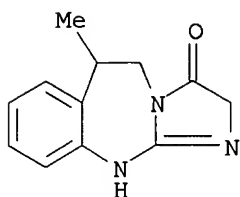


RN 97844-60-5 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-1-methyl-8-propoxy- (9CI) (CA INDEX NAME)



Ex. 31

RN 97844-61-6 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

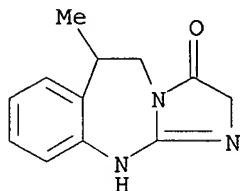


Ex. 32

● HCl

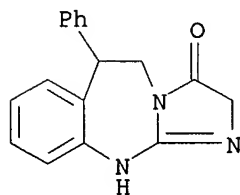
RN 97844-63-8 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-methyl-  
(9CI) (CA INDEX NAME)



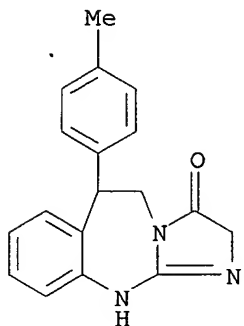
RN 97844-85-4 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-phenyl-  
(9CI) (CA INDEX NAME)



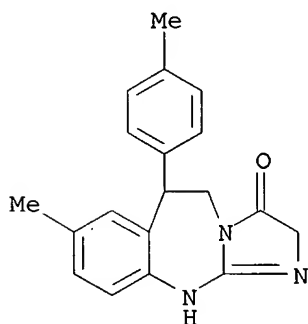
RN 97844-86-5 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(4-methylphenyl)- (9CI) (CA INDEX NAME)



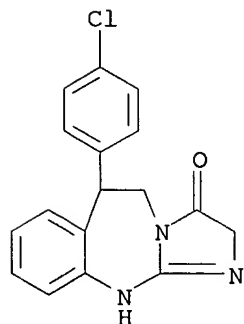
Ex 2

RN 97844-87-6 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8-methyl-6-(4-methylphenyl)- (9CI) (CA INDEX NAME)



Ex 3

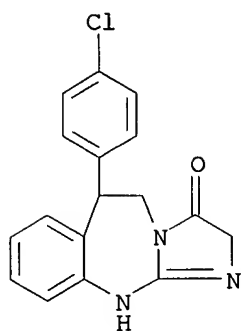
RN 97844-88-7 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 6-(4-chlorophenyl)-1,2,5,6-tetrahydro-, monohydrochloride (9CI) (CA INDEX NAME)



Ex 4  
8

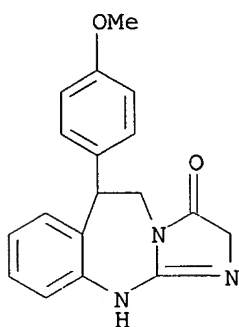
● HCl

RN 97844-89-8 CAPLUS  
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 6-(4-chlorophenyl)-1,2,5,6-tetrahydro- (9CI) (CA INDEX NAME)



RN 97844-90-1 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(4-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

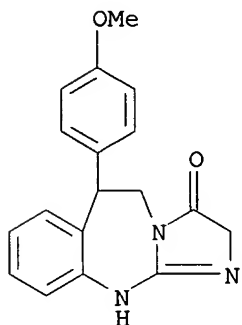


Ex 5

● HCl

RN 97844-91-2 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

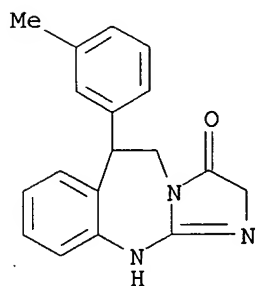


RN 97844-92-3 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(3-

10/019,683

methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

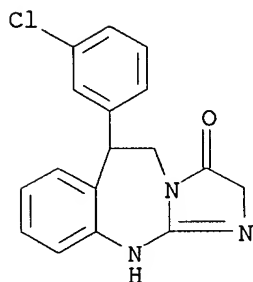


Ex. 6

● HCl

RN 97844-95-6 CAPLUS

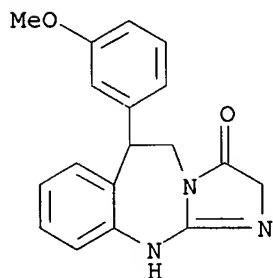
CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 6-(3-chlorophenyl)-1,2,5,6-tetrahydro- (9CI) (CA INDEX NAME)



Ex 7

RN 97844-98-9 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

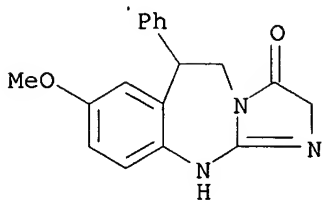


Ex. 9

RN 97844-99-0 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8-methoxy-6-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

10/019,683

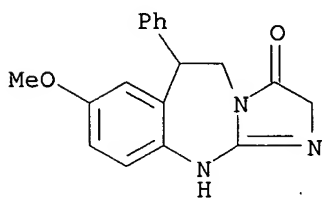


Ex. 10

● HCl

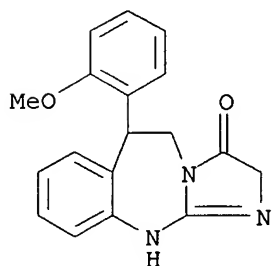
RN 97845-01-7 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8-methoxy-6-phenyl- (9CI) (CA INDEX NAME)



RN 97845-02-8 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(2-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

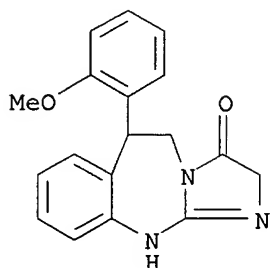


Ex. 11

● HCl

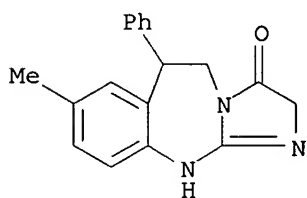
RN 97845-04-0 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-6-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 97845-05-1 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8-methyl-6-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

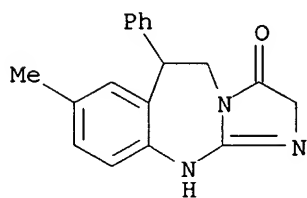


Ex 12

● HCl

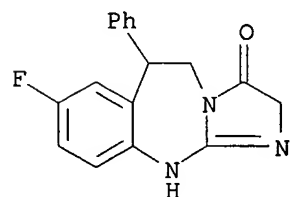
RN 97845-06-2 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8-methyl-6-phenyl- (9CI) (CA INDEX NAME)



RN 97845-09-5 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 8-fluoro-1,2,5,6-tetrahydro-6-phenyl- (9CI) (CA INDEX NAME)

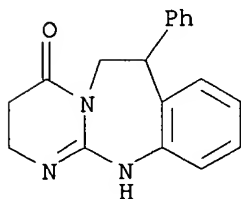


Ex. 13

10/019,683

RN 97845-12-0 CAPLUS

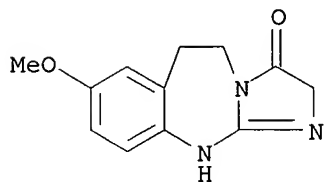
CN Pyrimido[2,1-b][1,3]benzodiazepin-4(1H)-one, 2,3,6,7-tetrahydro-7-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

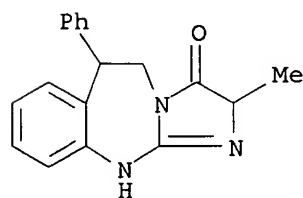
RN 97866-88-1 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-8-methoxy- (9CI) (CA INDEX NAME)



RN 97906-26-8 CAPLUS

CN 3H-Imidazo[2,1-b][1,3]benzodiazepin-3-one, 1,2,5,6-tetrahydro-2-methyl-6-phenyl-, (2S-trans)- (9CI) (CA INDEX NAME)



Ex 16



10/019,683

~~104~~ ANSWER 26 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:149293 CAPLUS

DOCUMENT NUMBER: 102:149293

TITLE: Triazolo[2,3-c][1,3]benzodiazepines and their  
therapeutical use

INVENTOR(S): Vlattas, Isidoros

PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Switz.

SOURCE: Eur. Pat. Appl., 45 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

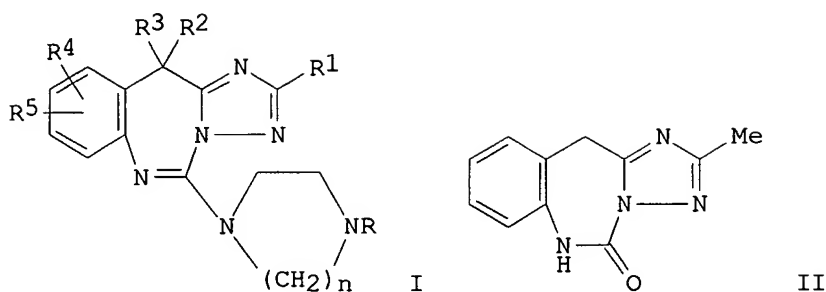
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 129509	A2	19841227	EP 1984-810264	19840529
EP 129509	A3	19850911		
EP 129509	B1	19890823		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 45740	E	19890915	AT 1984-810264	19840529
DK 8402764	A	19841207	DK 1984-2764	19840604
FI 8402228	A	19841207	FI 1984-2228	19840604
FI 78098	B	19890228		
FI 78098	C	19890612		
CA 1215044	A1	19861209	CA 1984-455776	19840604
IL 72015	A1	19871231	IL 1984-72015	19840604
NO 8402254	A	19841207	NO 1984-2254	19840605
NO 162070	B	19890724		
NO 162070	C	19891101		
AU 8429106	A1	19841213	AU 1984-29106	19840605
AU 574075	B2	19880630		
ZA 8404186	A	19850227	ZA 1984-4186	19840605
DD 220310	A5	19850327	DD 1984-263805	19840605
HU 34488	A2	19850328	HU 1984-2181	19840605
HU 190930	B	19861228		
ES 533135	A1	19850801	ES 1984-533135	19840605
JP 60006689	A2	19850114	JP 1984-114697	19840606
JP 03054669	B4	19910820		
US 4595535	A	19860617	US 1984-643136	19840822
PRIORITY APPLN. INFO.:			US 1983-501328	A 19830606
			EP 1984-810264	A 19840529

OTHER SOURCE(S): MARPAT 102:149293

GI



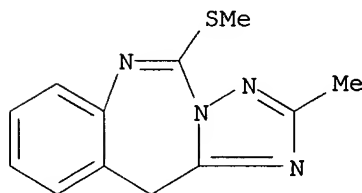
AB The title compds. [I; R = H, alkenyl, alkynyl, alkanoyl, (un)substituted alkyl, alkoxycarbonyl; R1 = H, alkoxy, alkylthio, alkoxycarbonyl, acyloxy, OH, halo, cyano, F3C, CO2H, carbamoyl, (un)substituted alkyl; R2, R3 = H, alkyl; R4, R5 = H, alkyl, alkoxy, alkylthio, OH, halo, F3C, sulfamoyl; n = 2, 3] were prepared. Thus, 2-O2NC6H4CH2CN was treated with EtOH and HCl to give 2-O2NC6H4CH2C(NH)OEt which was cyclocondensed with AcNHNH2 to give 3-methyl-5-(o-nitrobenzyl)-1,2,4-triazole. This was reduced and cyclocondensed with 1,1'-carbonyldiimidazole to give triazolobenzodiazepinone II, which was converted in 2 steps to I (R = R1 = Me, R2-R5 = H) (III). III had antipsychotic activity in rats at  $\leq 1.0$  mg/kg orally and inhibited histamine activation by adenylate cyclase with an IC50 of  $\text{apprx. } 3 \times 10^{-6}$  M.

IT 95614-51-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with methylpiperazine)

RN 95614-51-0 CAPLUS

CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(methylthio)-  
(9CI) (CA INDEX NAME)

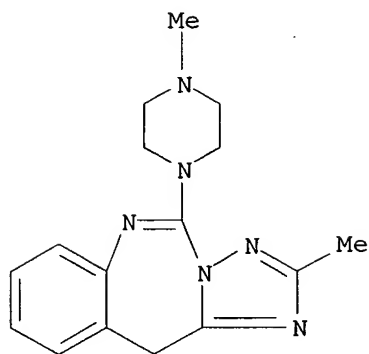


IT 95634-82-5P 95634-83-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and antihistaminic and tranquilizer activity of)

RN 95634-82-5 CAPLUS

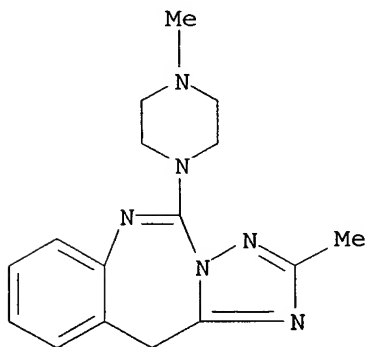
CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 95634-83-6 CAPLUS  
 CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

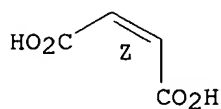
CRN 95634-82-5  
 CMF C16 H20 N6



CM 2

CRN 110-16-7  
 CMF C4 H4 O4

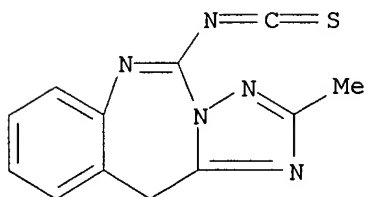
Double bond geometry as shown.



IT 95614-49-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and condensation of, with methylpiperazine)  
 RN 95614-49-6 CAPLUS  
 CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 5-isothiocyanato-2-methyl-

10/019,683

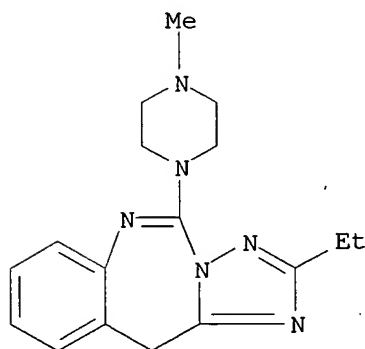
(9CI) (CA INDEX NAME)



IT 95634-85-8P 95634-87-0P 95634-89-2P  
95634-91-6P 95634-93-8P 95663-86-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 95634-85-8 CAPLUS  
CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-ethyl-5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

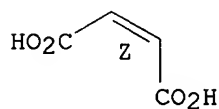
CRN 95634-84-7  
CMF C17 H22 N6



CM 2

CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



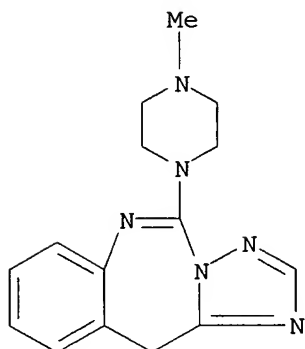
RN . 95634-87-0 CAPLUS  
CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

10/019,683

CM 1

CRN 95634-86-9

CMF C15 H18 N6

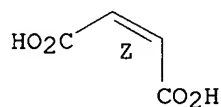


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



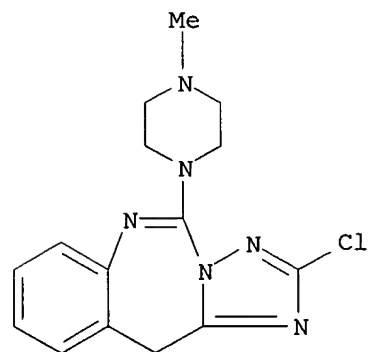
RN 95634-89-2 CAPLUS

CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 2-chloro-5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 95634-88-1

CMF C15 H17 Cl N6



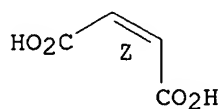
10/019,683

CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



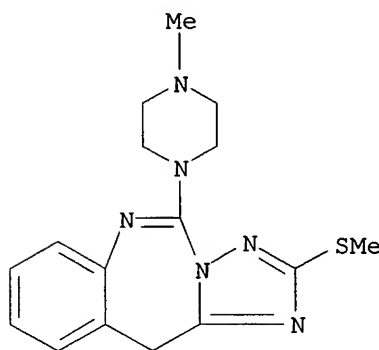
RN 95634-91-6 CAPLUS

CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)-2-(methylthio)-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 95634-90-5

CMF C16 H20 N6 S

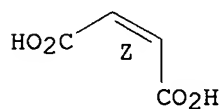


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



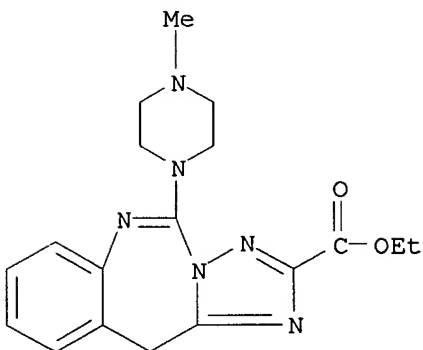
RN 95634-93-8 CAPLUS

CN 11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine-2-carboxylic acid, 5-(4-methyl-1-piperazinyl)-, ethyl ester, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

10/019,683

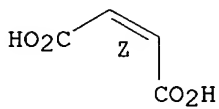
CRN 95634-92-7  
CMF C18 H22 N6 O2



CM 2

CRN 110-16-7  
CMF C4 H4 O4

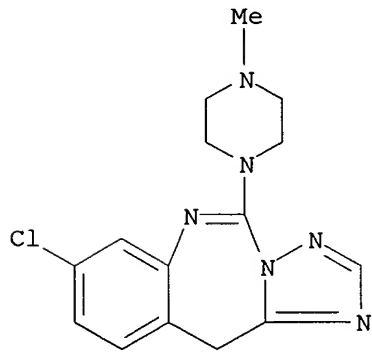
Double bond geometry as shown.



RN	95663-86-8	CAPLUS
CN	11H-[1,2,4]Triazolo[1,5-c][1,3]benzodiazepine, 8-chloro-5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)	

CM 1

CRN 95663-85-7  
CMF C15 H17 Cl N6



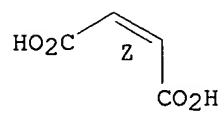
10/019,683

CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

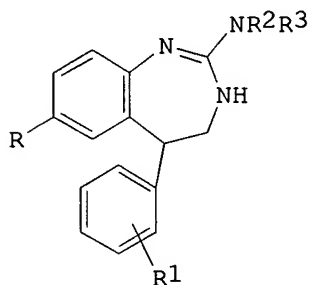




L14 ANSWER 27 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:62284 CAPLUS  
 DOCUMENT NUMBER: 102:62284  
 TITLE: 2-Amino-5-phenyl-1,3-benzodiazepines and medicines containing  
 INVENTOR(S): Bayssat, Michel; Ferrand, Gerard; Depin, Jean-claude  
 PATENT ASSIGNEE(S): LIPHA, Lyonnaise Industrielle Pharmaceutique, Fr.  
 SOURCE: Fr. Demande, 22 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2540871	A1	19840817	FR 1983-2475	19830216
FR 2540871	B1	19860110		
ZA 8400765	A	19840926	ZA 1984-765	19840201
EP 117794	A1	19840905	EP 1984-400233	19840203
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
CA 1213585	A1	19861104	CA 1984-446858	19840206
US 4554273	A	19851119	US 1984-578046	19840207
ES 529728	A1	19841101	ES 1984-529728	19840215
JP 59155373	A2	19840904	JP 1984-26197	19840216
PRIORITY APPLN. INFO.:			FR 1983-2475	A 19830216
OTHER SOURCE(S):	MARPAT 102:62284			
GI				



I

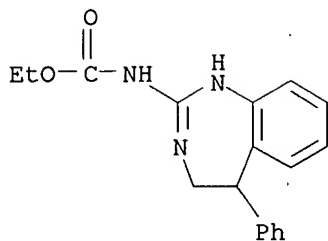
AB Title compds. I [R and R1 are H, halo, alkyl, alkoxy; R2 = H, alkyl; R3 = H, alkyl, cycloalkyl, arylalkyl, heteroarylalkyl, (dialkylamino)alkyl, dialkylamino, carbalkoxy, cyano; or NR2R3 form a heterocycle], which were prepared, exhibited antidepressant activity. 2-Methylthio-5-phenyl-4,5-dihydro-3H-1,3-benzodiazepine hydriodide was heated with NH3 in EtOH, and the mixture was made alkaline to give I (R = R1 = R2 = R3 = H).

IT 94568-63-5P

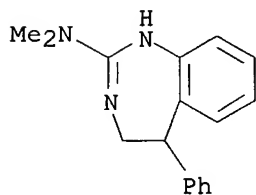
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation and antidepressant activity of)

RN 94568-63-5 CAPLUS

CN Carbamic acid, (4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)-, ethyl ester (9CI) (CA INDEX NAME)

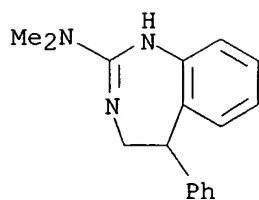


IT 94568-16-8P 94568-17-9P 94568-18-0P  
 94568-19-1P 94568-20-4P 94568-21-5P  
 94568-22-6P 94568-23-7P 94568-24-8P  
 94568-25-9P 94568-26-0P 94568-27-1P  
 94568-28-2P 94568-30-6P 94568-31-7P  
 94568-32-8P 94568-33-9P 94568-34-0P  
 94568-35-1P 94568-36-2P 94568-37-3P  
 94568-38-4P 94568-39-5P 94568-40-8P  
 94568-41-9P 94568-42-0P 94568-43-1P  
 94568-44-2P 94568-45-3P 94568-46-4P  
 94568-48-6P 94568-50-0P 94568-52-2P  
 94568-53-3P 94568-54-4P 94568-56-6P  
 94568-57-7P 94568-58-8P 94568-59-9P  
 94568-60-2P 94568-61-3P 94568-62-4P  
 94568-64-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 94568-16-8 CAPLUS  
 CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N,N-dimethyl-5-phenyl- (9CI)  
 (CA INDEX NAME)



RN 94568-17-9 CAPLUS  
 CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N,N-dimethyl-5-phenyl-,  
 ethanedioate (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 94568-16-8  
 CMF C17 H19 N3

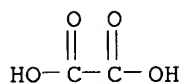
10/019,683



CM 2

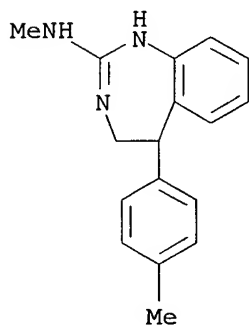
CRN 144-62-7

CMF C2 H2 O4



RN 94568-18-0 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-methyl-5-(4-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

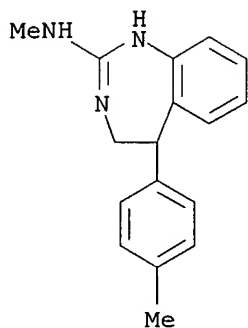


● HCl

RN 94568-19-1 CAPLUS

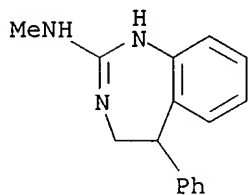
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-methyl-5-(4-methylphenyl)- (9CI) (CA INDEX NAME)

10/019,683



RN 94568-20-4 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-methyl-5-phenyl- (9CI) (CA INDEX NAME)



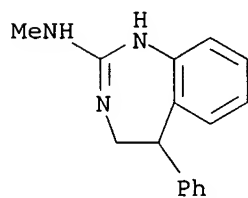
RN 94568-21-5 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-methyl-5-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 94568-20-4

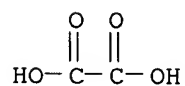
CMF C16 H17 N3



CM 2

CRN 144-62-7

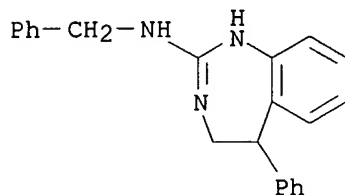
CMF C2 H2 O4



10/019,683

RN 94568-22-6 CAPLUS

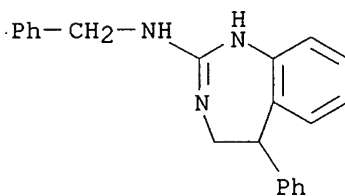
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-(phenylmethyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 94568-23-7 CAPLUS

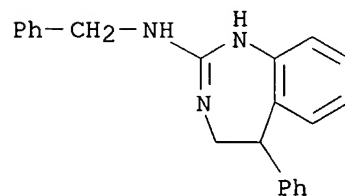
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-(phenylmethyl)-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

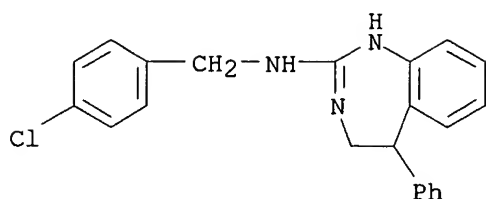
RN 94568-24-8 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-(phenylmethyl)- (9CI)  
(CA INDEX NAME)



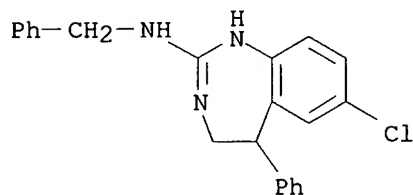
RN 94568-25-9 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-[(4-chlorophenyl)methyl]-4,5-dihydro-5-  
phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



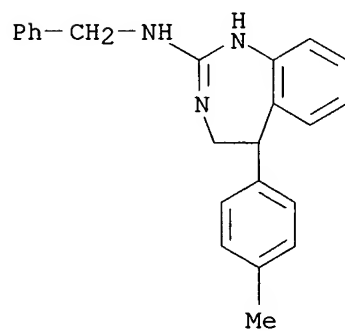
● HCl

RN 94568-26-0 CAPLUS  
 CN 1H-1,3-Benzodiazepin-2-amine, 7-chloro-4,5-dihydro-5-phenyl-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

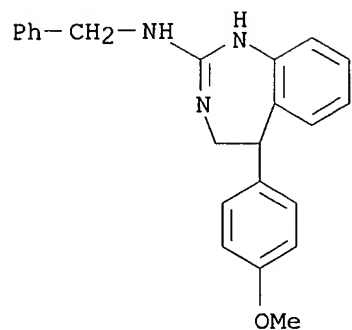
RN 94568-27-1 CAPLUS  
 CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-(4-methylphenyl)-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

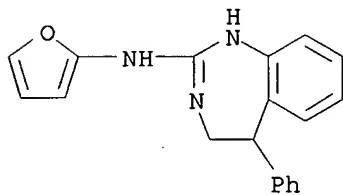
RN 94568-28-2 CAPLUS  
 CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-(4-methoxyphenyl)-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

10/019,683

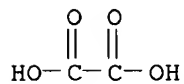


● HCl

RN 94568-30-6 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, N-2-furanyl-4,5-dihydro-5-phenyl-,  
ethanedioate (2:1) (9CI) (CA INDEX NAME)  
CM 1  
CRN 94568-29-3  
CMF C19 H17 N3 O

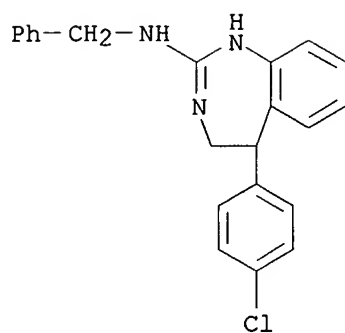


CM 2  
CRN 144-62-7  
CMF C2 H2 O4



RN 94568-31-7 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 5-(4-chlorophenyl)-4,5-dihydro-N-(  
phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

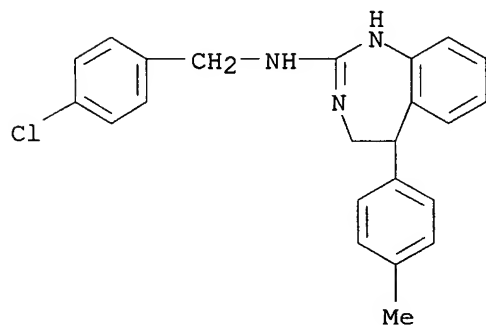
10/019,683



● HCl

RN 94568-32-8 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-[(4-chlorophenyl)methyl]-4,5-dihydro-5-(4-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

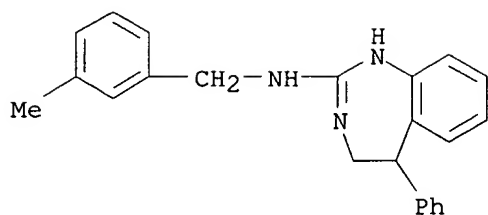


● HCl

RN 94568-33-9 CAPLUS

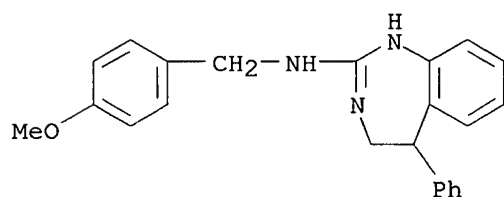
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-[(3-methylphenyl)methyl]-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)





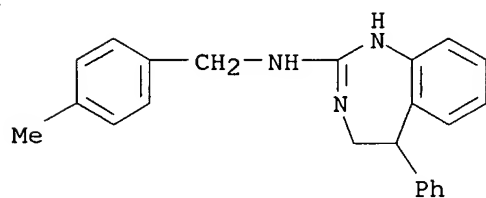
● HCl

RN 94568-34-0 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-[(4-methoxyphenyl)methyl]-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



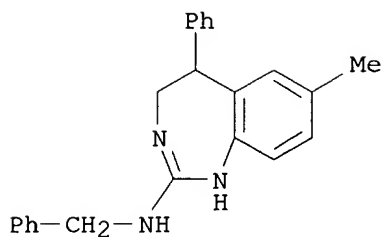
● HCl

RN 94568-35-1 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-[(4-methylphenyl)methyl]-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

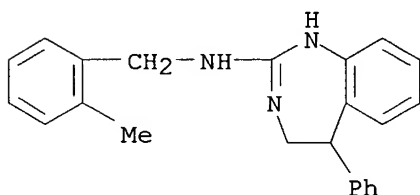
RN 94568-36-2 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-7-methyl-5-phenyl-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 94568-37-3 CAPLUS

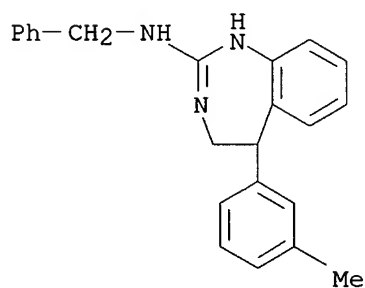
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-[(2-methylphenyl)methyl]-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 94568-38-4 CAPLUS

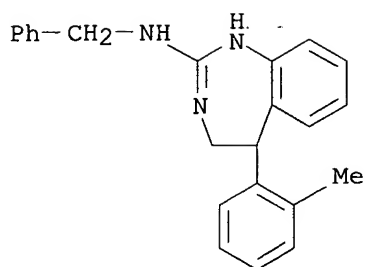
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-(3-methylphenyl)-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

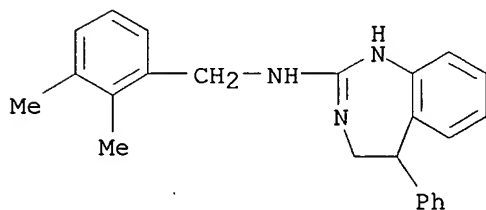
RN 94568-39-5 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-(2-methylphenyl)-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



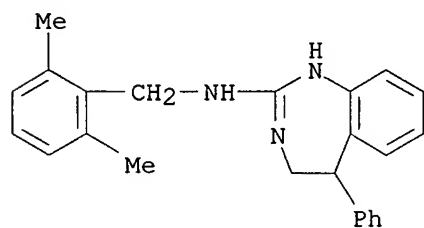
● HCl

RN 94568-40-8 CAPLUS  
 CN 1H-1,3-Benzodiazepin-2-amine, N-[(2,3-dimethylphenyl)methyl]-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

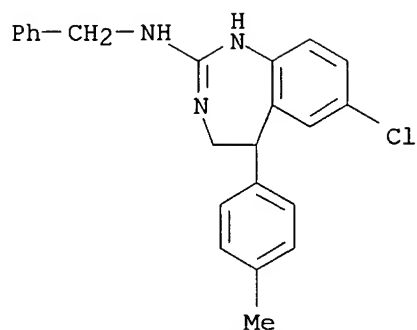
RN 94568-41-9 CAPLUS  
 CN 1H-1,3-Benzodiazepin-2-amine, N-[(2,6-dimethylphenyl)methyl]-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 94568-42-0 CAPLUS  
 CN 1H-1,3-Benzodiazepin-2-amine, 7-chloro-4,5-dihydro-5-(4-methylphenyl)-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

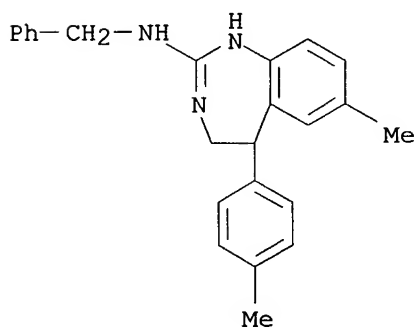
10/019,683



● HCl

RN 94568-43-1 CAPLUS

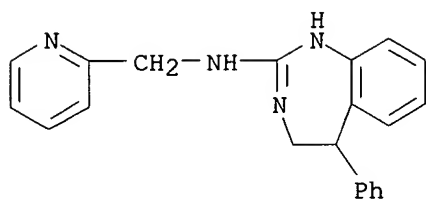
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-7-methyl-5-(4-methylphenyl)-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

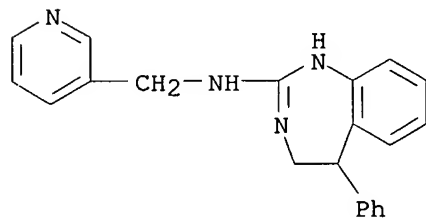
RN 94568-44-2 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-(2-pyridinylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)



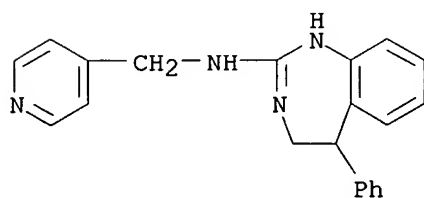
●2 HCl

RN 94568-45-3 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-(3-pyridinylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 94568-46-4 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-(4-pyridinylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

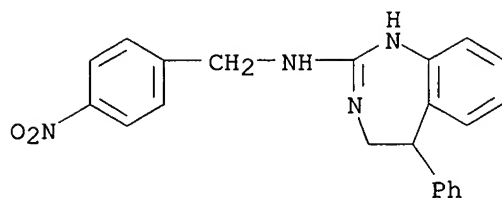
RN 94568-48-6 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-[(4-nitrophenyl)methyl]-5-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 94568-47-5

10/019,683

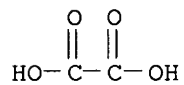
CMF C22 H20 N4 O2



CM 2

CRN 144-62-7

CMF C2 H2 O4



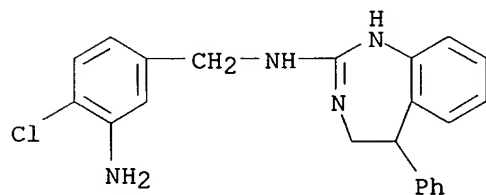
RN 94568-50-0 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-[(3-amino-4-chlorophenyl)methyl]-4,5-dihydro-5-phenyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 94568-49-7

CMF C22 H21 Cl N4

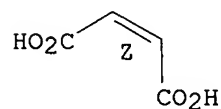


CM 2

CRN 110-16-7

CMF C4 H4 O4

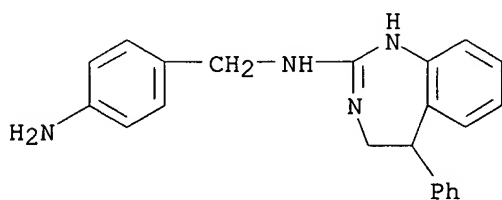
Double bond geometry as shown.



RN 94568-52-2 CAPLUS

10/019,683

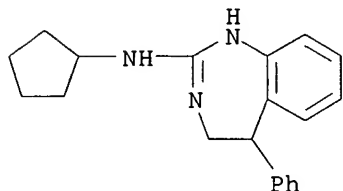
CN 1H-1,3-Benzodiazepin-2-amine, N-[(4-aminophenyl)methyl]-4,5-dihydro-5-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 94568-53-3 CAPLUS

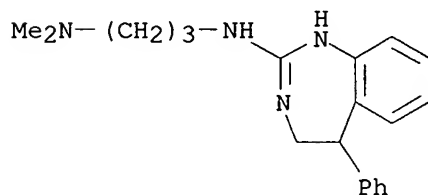
CN 1H-1,3-Benzodiazepin-2-amine, N-cyclopentyl-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 94568-54-4 CAPLUS

CN 1,3-Propanediamine, N'-(4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

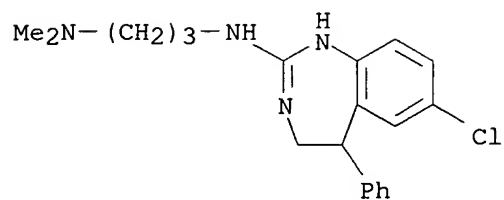
RN 94568-56-6 CAPLUS

CN 1,3-Propanediamine, N'-(7-chloro-4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)-N,N-dimethyl-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

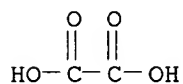
10/019,683

CRN 94568-55-5  
CMF C20 H25 Cl N4

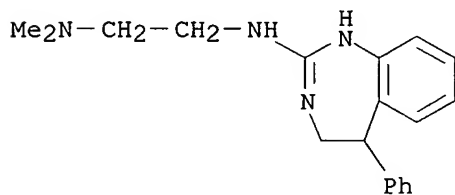


CM 2

CRN 144-62-7  
CMF C2 H2 O4



RN 94568-57-7 CAPLUS  
CN 1,2-Ethanediamine, N'-(4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

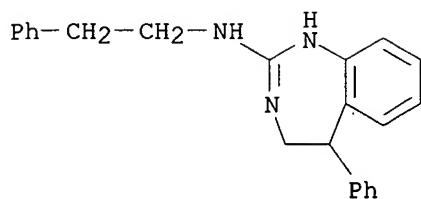


●2 HCl

RN 94568-58-8 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-(2-phenylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



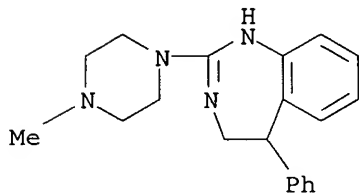
10/019,683



● HCl

RN 94568-59-9 CAPLUS

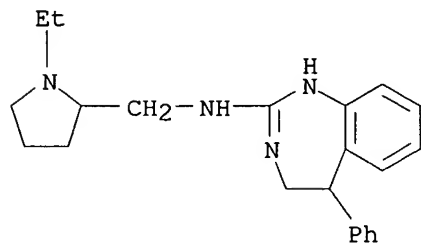
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(4-methyl-1-piperazinyl)-5-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 94568-60-2 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-[(1-ethyl-2-pyrrolidinyl)methyl]-4,5-dihydro-5-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



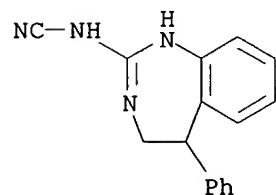
●2 HCl

RN 94568-61-3 CAPLUS

CN Benzenemethanol,  $\alpha$ -[[[4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)amino]methyl]- (9CI) (CA INDEX NAME)

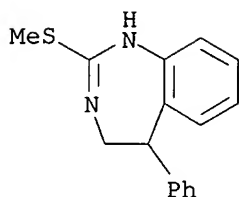
O[C@H](c1ccccc1)CNc2nc3c(c[nH]3c4ccccc42)Cc5ccccc5CN(C)N=C1NC(=N1Cc2ccccc2)Cc3ccccc3

RN	94568-64-6	CAPLUS		
CN	Cyanamide, (4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)- (9CI) (CA INDEX NAME)			



Page 166

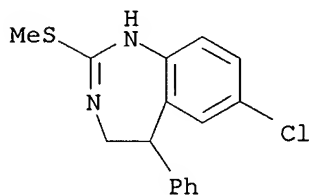
10/019,683



● HI

RN 90156-41-5 CAPLUS

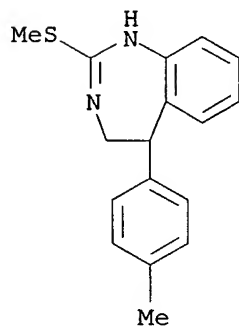
CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-2-(methylthio)-5-phenyl-, monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 90156-43-7 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(4-methylphenyl)-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)



● HI

IT 90156-45-9 94568-07-7 94568-09-9  
94568-11-3 94568-13-5 94594-64-6  
94594-65-7

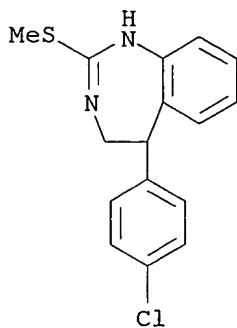
10/019,683

RL: PROC (Process)

(substitution of, with ammonia and benzylamine)

RN 90156-45-9 CAPLUS

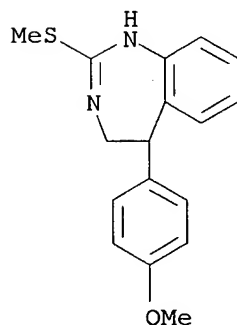
CN 1H-1,3-Benzodiazepine, 5-(4-chlorophenyl)-4,5-dihydro-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 94568-07-7 CAPLUS

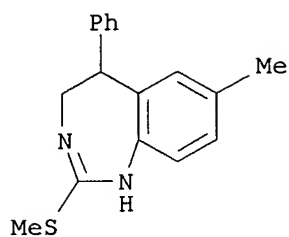
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(4-methoxyphenyl)-2-(methylthio)-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

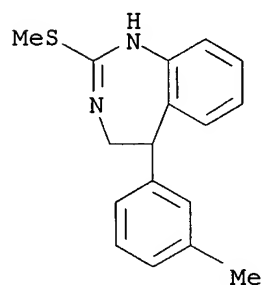
RN 94568-09-9 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7-methyl-2-(methylthio)-5-phenyl-,  
monohydriodide (9CI) (CA INDEX NAME)



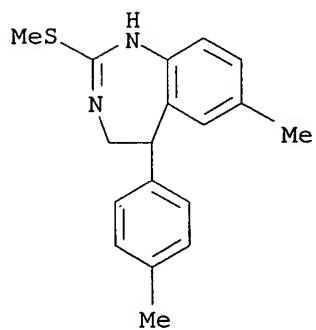
● HI

RN 94568-11-3 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(3-methylphenyl)-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 94568-13-5 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7-methyl-5-(4-methylphenyl)-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)

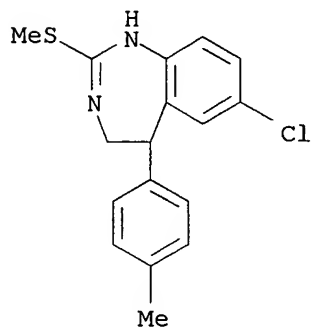


● HI

10/019,683

RN 94594-64-6 CAPLUS

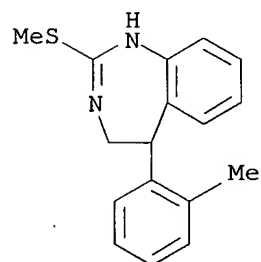
CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-5-(4-methylphenyl)-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 94594-65-7 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(2-methylphenyl)-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)



● HI

10/019,683

114 ANSWER 28 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:611186 CAPLUS

DOCUMENT NUMBER: 101:211186

TITLE: 5-Diazacycloalkylimidazo[1,2-c][1,3]benzodiazepines

INVENTOR(S): Vlattas, Isidoros

PATENT ASSIGNEE(S): Ciba-Geigy Corp. , USA

SOURCE: U.S., 12 pp. Cont.-in-part of U.S. Ser. No. 328,274, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

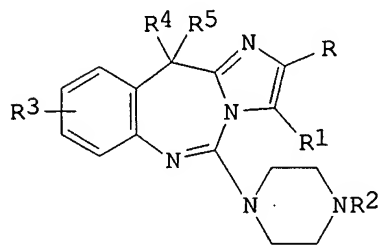
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

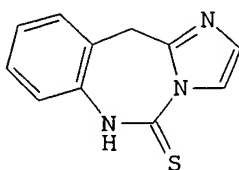
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4460587	A	19840717	US 1982-444957	19821129
US 4459232	A	19840710	US 1982-417746	19820913
US 4460508	A	19840717	US 1982-417747	19820913
FI 8204170	A	19830608	FI 1982-4170	19821103
GB 2115407	A1	19830907	GB 1982-34334	19821202
GB 2115407	B2	19850724		
ES 517912	A1	19841201	ES 1982-517912	19821203
CA 1180011	A1	19841225	CA 1982-416953	19821203
DK 8205402	A	19830608	DK 1982-5402	19821206
NO 8204090	A	19830608	NO 1982-4090	19821206
AU 8291315	A1	19830616	AU 1982-91315	19821206
JP 58109489	A2	19830629	JP 1982-212828	19821206
ZA 8208954	A	19830928	ZA 1982-8954	19821206
DD 203547	A5	19831026	DD 1982-245615	19821206
HU 27368	O	19831028	HU 1982-3911	19821206
HU 187191	B	19851128		
ES 530125	A1	19851101	ES 1984-530125	19840228
US 4507311	A	19850326	US 1984-602649	19840423
PRIORITY APPLN. INFO.:			US 1981-328274	A2 19811207
			US 1982-444957	A3 19821129

OTHER SOURCE(S): CASREACT 101:211186

GI



I



II

AB Piperazinylimidazobenzodiazepines I (R, R1 = H, alkyl, cyano, CO2H, alkoxy, carbamoyl; R2 = H, alkyl, alkoxy, hydroxyalkyl; R3 = H, alkyl, alkoxy, alkylthio, halo, CF3; R4, R5 = H, alkyl) and their N-oxides were prepared. Thus, 2-O2NC6H4Me was treated with (CO2Et)2,

followed by  $\text{H}_2\text{NOH}\cdot\text{HCl}$  and acidic hydrolysis to give  $2\text{-O}_2\text{NC}_6\text{H}_4\text{CH}_2\text{C}(\text{:NOH})\text{CO}_2\text{H}$ , which was heated to give  $2\text{-O}_2\text{NC}_6\text{H}_4\text{CH}_2\text{CN}$ .  
 Ethanolysis of the latter compound gave  $2\text{-O}_2\text{NC}_6\text{H}_4\text{CH}_2\text{C}(\text{:NH})\text{OEt}$  which was  
 cyclocondensed with  $\text{H}_2\text{NCH}_2\text{CH}(\text{OMe})_2$  to give  $2\text{-(2-nitrobenzyl)imidazole}$ .  
 This was reduced to the amino derivative and cyclocondensed with  $\text{CSCl}_2$  to give  
 imidazobenzodiazepinethione II. II was S-methylated with MeI and aminated  
 with 1-methylpiperazine to give I ( $\text{R} = \text{R}_1 = \text{R}_3 = \text{R}_4 = \text{R}_5 = \text{H}$ ,  $\text{R}_2 = \text{Me}$ ,  
 III). III at  $1 + 10^{-6}\text{M}$  inhibited histamine activation of adenylate  
 cyclase in guinea pig cerebral cortex vesicles by 50% and at 50 mg/kg  
 orally to monkeys and rats blocked conditioned avoidance behavior.

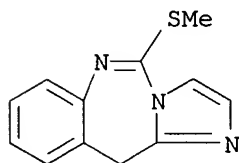
IT 87081-83-2P 87081-98-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation and amination of, by methylpiperazine)

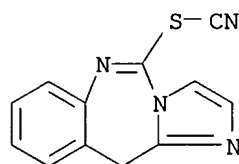
RN 87081-83-2 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(methylthio)- (9CI) (CA INDEX  
 NAME)



RN 87081-98-9 CAPLUS

CN Thiocyanic acid, 11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl ester (9CI)  
 (CA INDEX NAME)



IT 92989-77-0P

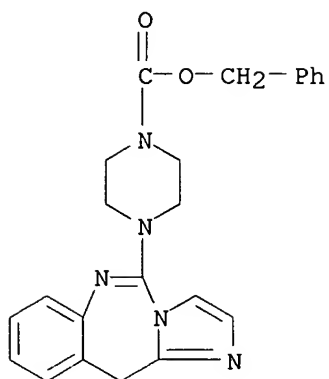
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation and deprotection of)

RN 92989-77-0 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-(11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl)-  
 , phenylmethyl ester (9CI) (CA INDEX NAME)



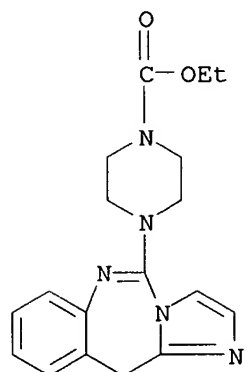


IT 87082-00-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and hydride reduction of)

RN 87082-00-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-(11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl)-  
, ethyl ester (9CI) (CA INDEX NAME)

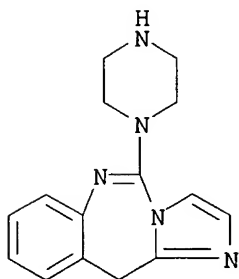


IT 87082-09-5P

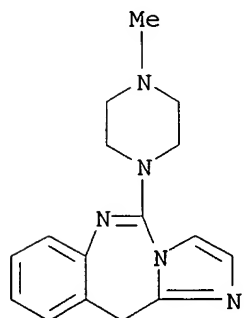
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and methylation of)

RN 87082-09-5 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(1-piperazinyl)- (9CI) (CA INDEX  
NAME)

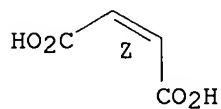


IT 87081-85-4P 87081-94-5P 87081-95-6P  
 87082-03-9P 87082-04-0P 87082-05-1P  
 87082-06-2P 87082-07-3P 87082-11-9P  
 87082-17-5P 87092-49-7P 92976-11-9P  
 92976-12-0P 92989-78-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 87081-85-4 CAPLUS  
 CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)-,  
 (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 87081-84-3  
 CMF C16 H19 N5



CM 2  
 CRN 110-16-7  
 CMF C4 H4 O4

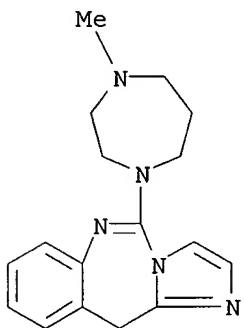
Double bond geometry as shown.



RN 87081-94-5 CAPLUS

10/019,683

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)- (9CI) (CA INDEX NAME)



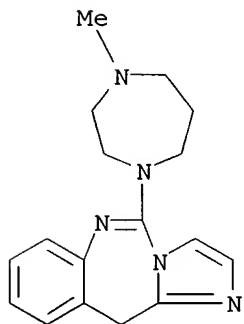
RN 87081-95-6 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 87081-94-5

CMF C17 H21 N5

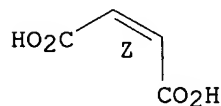


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

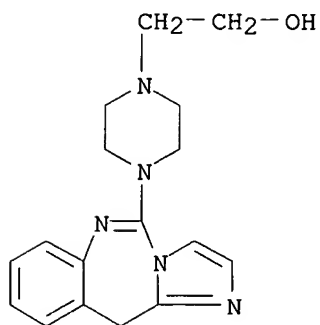


RN 87082-03-9 CAPLUS

CN 1-Piperazineethanol, 4-(11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl)- (9CI)

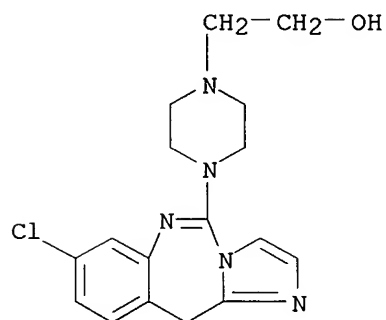
10/019,683

(CA INDEX NAME)



RN 87082-04-0 CAPLUS

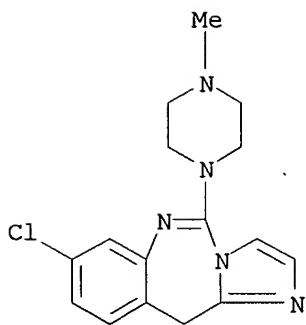
CN 1-Piperazineethanol, 4-(8-chloro-11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

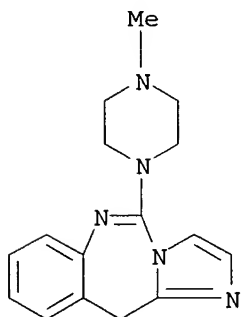
RN 87082-05-1 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 8-chloro-5-(4-methyl-1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



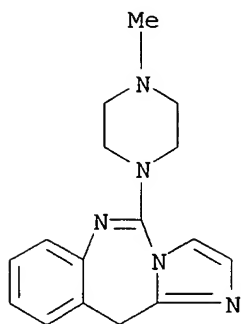
●2 HCl

RN 87082-06-2 CAPLUS  
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 87082-07-3 CAPLUS  
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

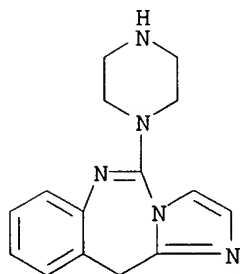


● HCl

RN 87082-11-9 CAPLUS  
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(1-piperazinyl)-,  
(2Z)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

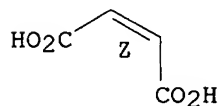
CRN 87082-09-5  
CMF C15 H17 N5



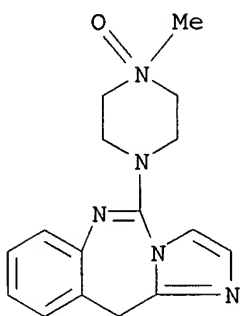
CM 2

CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



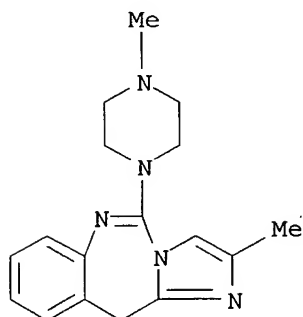
RN 87082-17-5 CAPLUS  
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-4-oxido-1-piperazinyl)-  
(9CI) (CA INDEX NAME)



RN 87092-49-7 CAPLUS  
 CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

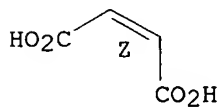
CRN 87082-14-2  
 CMF C17 H21 N5



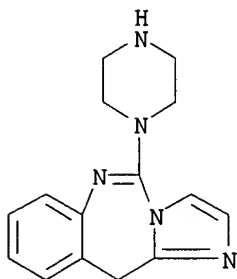
CM 2

CRN 110-16-7  
 CMF C4 H4 O4

Double bond geometry as shown.

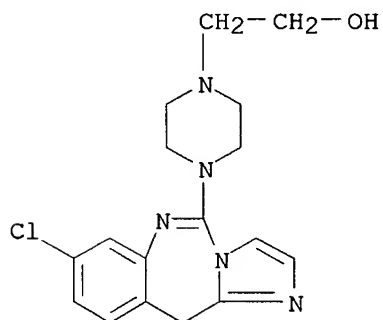


RN 92976-11-9 CAPLUS  
 CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(1-piperazinyl)-, monohydrobromide (9CI) (CA INDEX NAME)

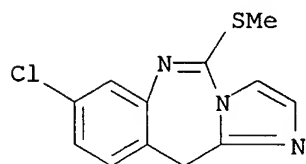


● HBr

RN 92976-12-0 CAPLUS  
CN 1-Piperazineethanol, 4-(8-chloro-11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl)- (9CI) (CA INDEX NAME)



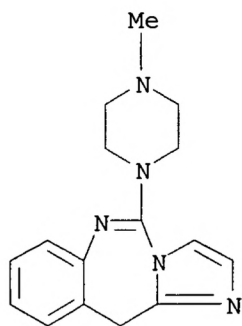
RN 92989-78-1 CAPLUS  
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 8-chloro-5-(methylthio)- (9CI) (CA INDEX NAME)



IT 87081-84-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation, oxidation, and antihistaminic and neuroleptic activities of)  
RN 87081-84-3 CAPLUS  
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



10/019,683



L14 ANSWER 29 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:490991 CAPLUS

DOCUMENT NUMBER: 101:90991

TITLE: 2-Anilino-5-phenyl-1,3-benzodiazepines and medicines containing them

INVENTOR(S): Bayssat, Michel; Ferrand, Gerard; Chabert, Janine

PATENT ASSIGNEE(S): LIPHA, Lyonnaise Industrielle Pharmaceutique, Fr.

SOURCE: Fr. Demande, 17 pp.

CODEN: FRXXBL

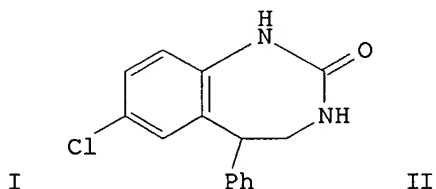
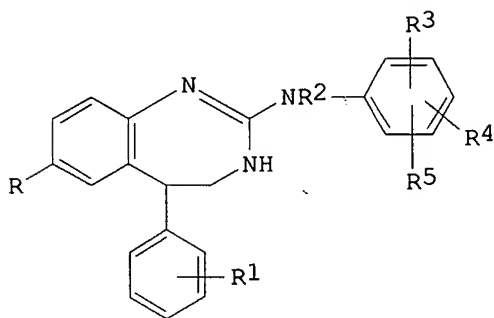
DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2531428	A1	19840210	FR 1982-13605	19820804
FR 2531428	B1	19850222		
PRIORITY APPLN. INFO.:			FR 1982-13605	19820804
OTHER SOURCE(S):		CASREACT 101:90991; MARPAT 101:90991		
GI				



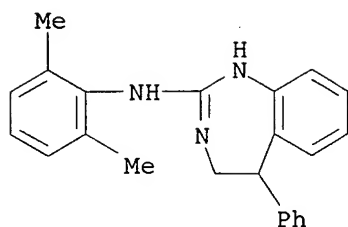
AB Title compds. I (R and R1 are H, halo, alkyl, alkoxy; R2 = H, alkyl; R3, R4, and R5 are H, halo, alkyl, alkoxy, CF3, carbalkoxy), which were prepared, exhibited diuretic activity. Benzodiazepinone derivative II was heated with POCl3, and the 2,7-dichloro compound obtained was heated with 2,6-Me2C6H3NH2 at 140° to give I (R = Cl, R1 = R2 = R5 = H, R3 = 2-Me, R4 = 6-Me).

IT 90835-01-1 90835-02-2 90835-03-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(anilinobenzodiazepines)

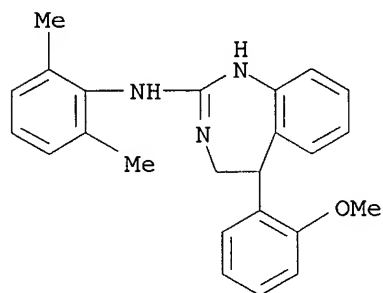
RN 90835-01-1 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-5-phenyl-  
(9CI) (CA INDEX NAME)



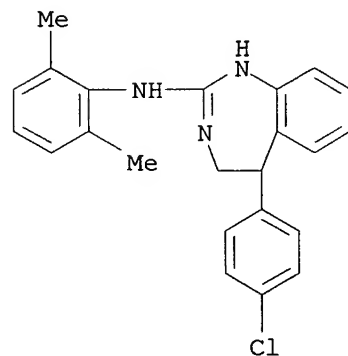
RN 90835-02-2 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-5-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 90835-03-3 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 5-(4-chlorophenyl)-N-(2,6-dimethylphenyl)-4,5-dihydro- (9CI) (CA INDEX NAME)

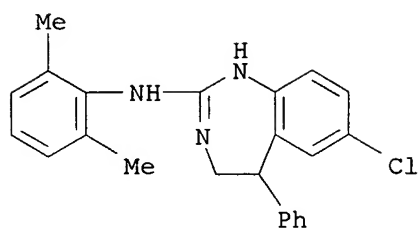


IT 90834-69-8P 90834-72-3P 90834-78-9P  
90834-83-6P 90834-85-8P 90834-89-2P  
90834-99-4P 90835-00-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and diuretic activity of)

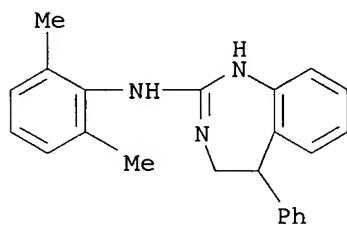
RN 90834-69-8 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 7-chloro-N-(2,6-dimethylphenyl)-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



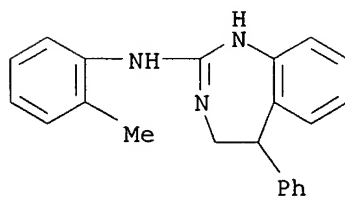
● HCl

RN 90834-72-3 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

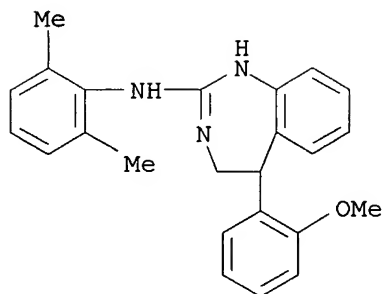
RN 90834-78-9 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-(2-methylphenyl)-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 90834-83-6 CAPLUS  
CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-5-(2-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

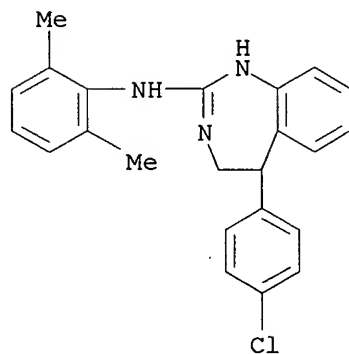
10/019,683



● HCl

RN 90834-85-8 CAPLUS

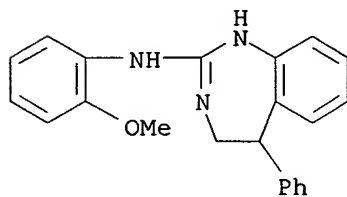
CN 1H-1,3-Benzodiazepin-2-amine, 5-(4-chlorophenyl)-N-(2,6-dimethylphenyl)-4,5-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 90834-89-2 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-(2-methoxyphenyl)-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

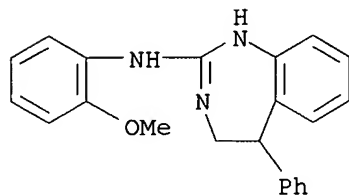


● HCl

10/019,683

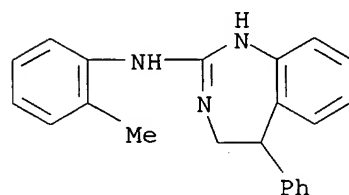
RN 90834-99-4 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-(2-methoxyphenyl)-5-phenyl-  
(9CI) (CA INDEX NAME)



RN 90835-00-0 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-(2-methylphenyl)-5-phenyl-  
(9CI) (CA INDEX NAME)

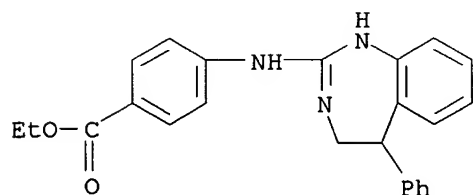


IT 90834-97-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and saponification of)

RN 90834-97-2 CAPLUS

CN Benzoic acid, 4-[(4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)amino]-,  
ethyl ester (9CI) (CA INDEX NAME)



IT 90834-71-2P 90834-73-4P 90834-74-5P

90834-75-6P 90834-76-7P 90834-77-8P

90834-79-0P 90834-80-3P 90834-81-4P

90834-82-5P 90834-84-7P 90834-86-9P

90834-87-0P 90834-88-1P 90834-90-5P

90834-91-6P 90834-92-7P 90834-93-8P

90834-95-0P 90834-96-1P 90834-98-3P

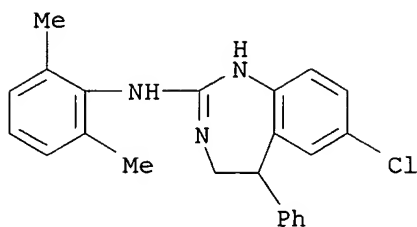
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 90834-71-2 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, 7-chloro-N-(2,6-dimethylphenyl)-4,5-dihydro-

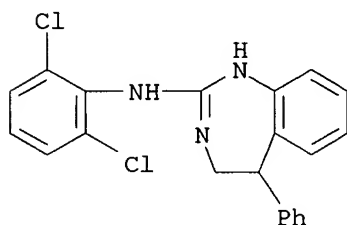
10/019,683

5-phenyl- (9CI) (CA INDEX NAME)



RN 90834-73-4 CAPLUS

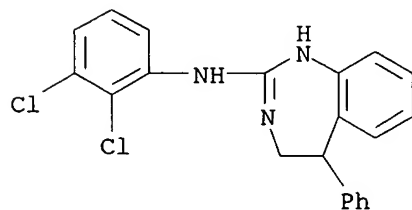
CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dichlorophenyl)-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 90834-74-5 CAPLUS

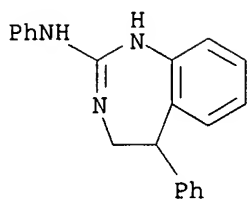
CN 1H-1,3-Benzodiazepin-2-amine, N-(2,3-dichlorophenyl)-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



RN 90834-75-6 CAPLUS

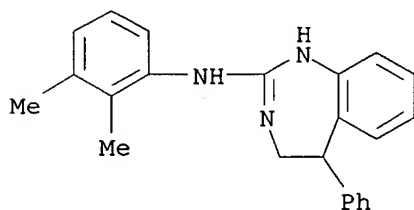
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N,5-diphenyl- (9CI) (CA INDEX NAME)

10/019,683



RN 90834-76-7 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,3-dimethylphenyl)-4,5-dihydro-5-phenyl-  
(9CI) (CA INDEX NAME)



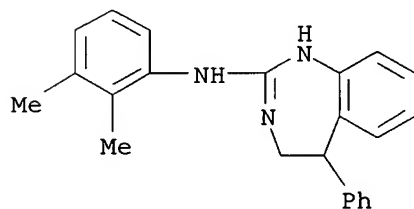
RN 90834-77-8 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,3-dimethylphenyl)-4,5-dihydro-5-phenyl-  
, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 90834-76-7

CMF C23 H23 N3

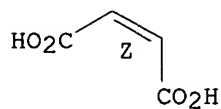


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

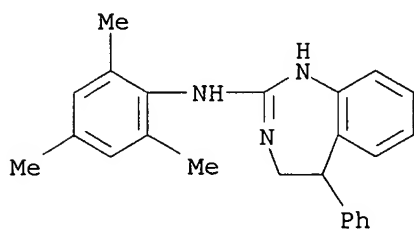


RN 90834-79-0 CAPLUS



10/019,683

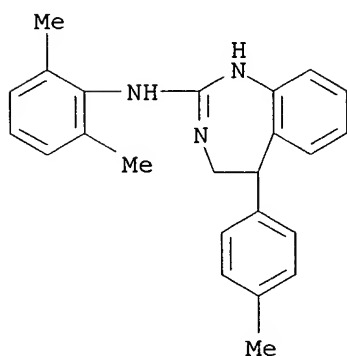
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-(2,4,6-trimethylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 90834-80-3 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-5-(4-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

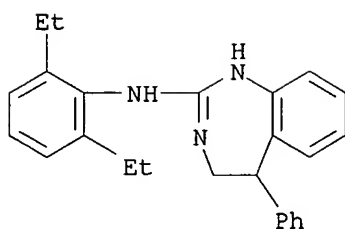


● HCl

RN 90834-81-4 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-diethylphenyl)-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

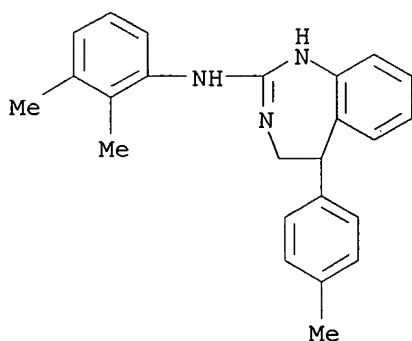
10/019,683



● HCl

RN 90834-82-5 CAPLUS

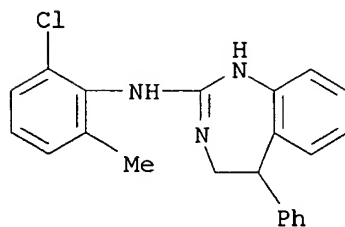
CN 1H-1,3-Benzodiazepin-2-amine, N-(2,3-dimethylphenyl)-4,5-dihydro-5-(4-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 90834-84-7 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2-chloro-6-methylphenyl)-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

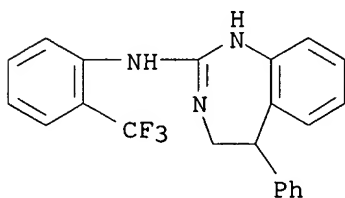


● HCl

RN 90834-86-9 CAPLUS

10/019,683

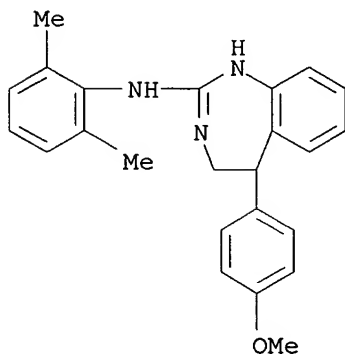
RN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-5-phenyl-N-[2-(trifluoromethyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 90834-87-0 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-5-(4-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

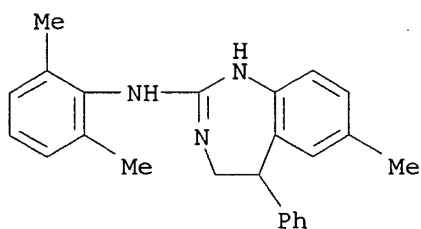


● HCl

RN 90834-88-1 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-7-methyl-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

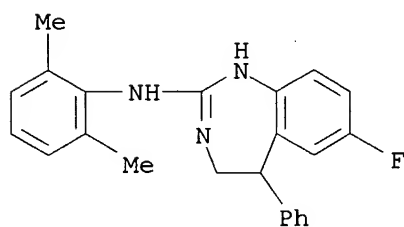
10/019,683



● HCl

RN 90834-90-5 CAPLUS

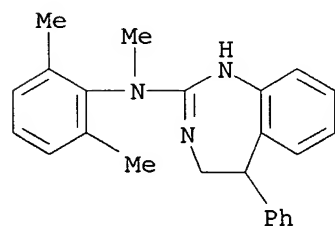
CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-7-fluoro-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 90834-91-6 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-N-methyl-5-phenyl- (9CI) (CA INDEX NAME)



RN 90834-92-7 CAPLUS

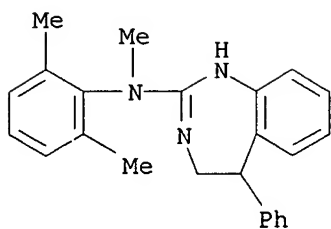
CN 1H-1,3-Benzodiazepin-2-amine, N-(2,6-dimethylphenyl)-4,5-dihydro-N-methyl-5-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 90834-91-6

CMF C24 H25 N3

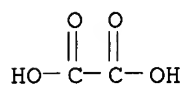
10/019,683



CM 2

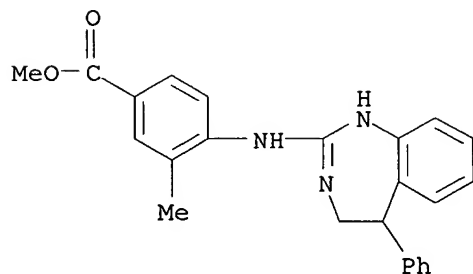
CRN 144-62-7

CMF C2 H2 O4



RN 90834-93-8 CAPLUS

CN Benzoic acid, 4-[(4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)amino]-3-methyl-, methyl ester (9CI) (CA INDEX NAME)



RN 90834-95-0 CAPLUS

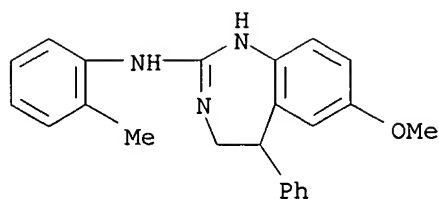
CN Ethanedioic acid, monoethyl ester, compd. with 4,5-dihydro-7-methoxy-N-(2-methylphenyl)-5-phenyl-1H-1,3-benzodiazepin-2-amine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 90834-94-9

CMF C23 H23 N3 O

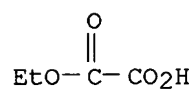
10/019,683



CM 2

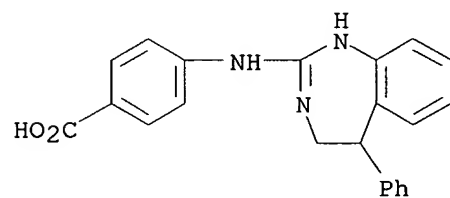
CRN 617-37-8

CMF C4 H6 O4



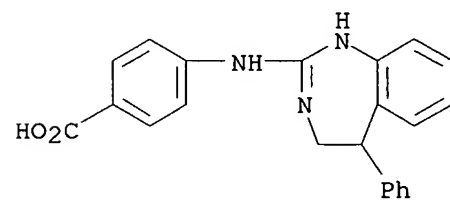
RN 90834-96-1 CAPLUS

CN Benzoic acid, 4-[(4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)amino]-  
(9CI) (CA INDEX NAME)



RN 90834-98-3 CAPLUS

CN Benzoic acid, 4-[(4,5-dihydro-5-phenyl-1H-1,3-benzodiazepin-2-yl)amino]-,  
monohydrochloride (9CI) (CA INDEX NAME)



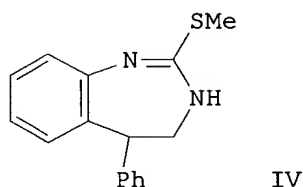
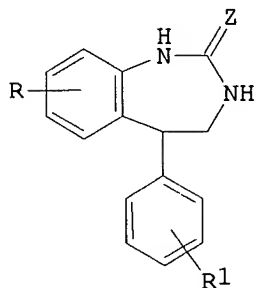
● HCl

L14 ANSWER 30 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:209887 CAPLUS  
 DOCUMENT NUMBER: 100:209887  
 TITLE: 5-Phenyl-1,3-benzodiazepines and intermediates  
 INVENTOR(S): Bayssat, Michel; Ferrand, Gerard  
 PATENT ASSIGNEE(S): LIPHA, Lyonnaise Industrielle Pharmaceutique, Fr.  
 SOURCE: Fr. Demande, 19 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2528838	A1	19831223	FR 1982-10466	19820616
FR 2528838	B1	19851011		
PRIORITY APPLN. INFO.:			FR 1982-10466	19820616
OTHER SOURCE(S):	CASREACT 100:209887; MARPAT 100:209887			

GI



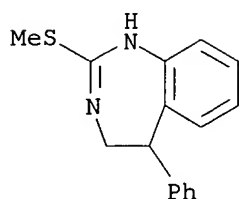
AB Benzodiazepines I (Z = O, S; R and R1 are H, halo, alkyl, alkoxy), useful as intermediates, especially for pharmaceuticals, were prepared. Thus, 2-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHPhCH<sub>2</sub>NH<sub>2</sub> (II) was treated with CS<sub>2</sub> to give I (Z = S, R = R1 = H) (III). The cyclocondensation of II with 1,1'-carbonyldiimidazole gave I (Z = O, R = R1 = H), which was also prepared by the H<sub>2</sub>O<sub>2</sub> oxidation of sulfide IV.

IT 90141-77-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and conversion of, to base)

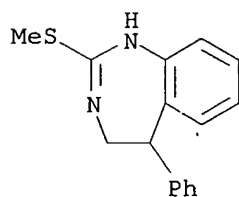
RN 90141-77-8 CAPLUS

CN 3H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-5-phenyl-,  
monohydriodide. (9CI) (CA INDEX NAME)

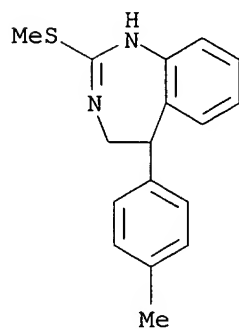


● HI

IT 90141-78-9P 90156-43-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and hydrolysis of, benzodiazepinone from)  
 RN 90141-78-9 CAPLUS  
 CN 3H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-5-phenyl- (9CI) (CA  
 INDEX NAME)



RN 90156-43-7 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-(4-methylphenyl)-2-(methylthio)-,  
 monohydriodide (9CI) (CA INDEX NAME)



● HI

IT 90156-45-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

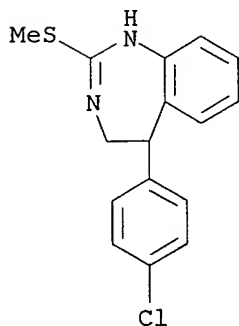


10/019,683

(preparation and hydrolysis of, benzodiazepone from)

RN 90156-45-9 CAPLUS

CN 1H-1,3-Benzodiazepine, 5-(4-chlorophenyl)-4,5-dihydro-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)



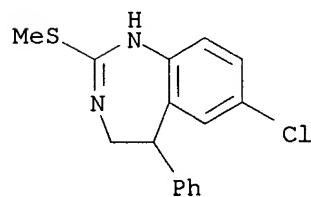
● HI

IT 90156-41-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 90156-41-5 CAPLUS

CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-2-(methylthio)-5-phenyl-, monohydriodide (9CI) (CA INDEX NAME)



● HI

10/019,683

L14 ANSWER 31 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:103402 CAPLUS

DOCUMENT NUMBER: 100:103402

TITLE: Condensed 1,3-benzodiazepines and medicines containing them

INVENTOR(S): Ferrand, Gerard; Bayssat, Michel; Depin, Jean Claude; Betbeder-Matibet, Annie

PATENT ASSIGNEE(S): LIPHA, Lyonnaise Industrielle Pharmaceutique, Fr.

SOURCE: Fr. Demande, 15 pp.

CODEN: FRXXBL

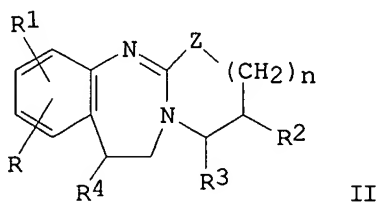
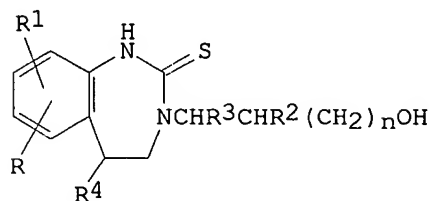
DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2521563	A1	19830819	FR 1982-2554	19820217
FR 2521563	B1	19840420		
PRIORITY APPLN. INFO.:			FR 1982-2554	19820217
OTHER SOURCE(S):		CASREACT 100:103402; MARPAT 100:103402		
GI				



AB Benzodiazepinethiones I (n = 0, 1; R and R1 are H, halo, alkoxy, OH, NO2, NH2; R2 and R3 are H, alkyl, Ph; R4 = H, alkyl, Ph) were converted to fused compds. II (Z = S, O), which exhibited antidepressant activity. Thus, I (n = 0, R = R1 = R2 = R3 = R4 = H) (III) was heated with MeSO3H at 100° to give II (Z = S, n = 0, R = R1 = R2 = R3 = R4 = H) (IV). A mixture of III and MeI in EtOH was refluxed to give II (Z = O, n = 0, R = R1 = R2 = R3 = R4 = H) hydriodide. IV. HCl inhibited reserpine-induced ptosis in mice with an ED50 value smaller than that of imipramine.

IT 88519-17-9P 88519-19-1P 88519-25-9P

88519-30-6P 88519-34-0P 88519-41-9P

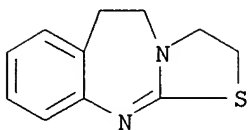
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and antidepressant activity of)

RN 88519-17-9 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-, monohydrochloride

10/019,683

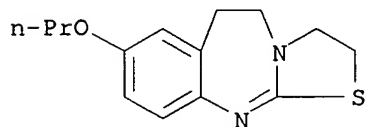
(9CI) (CA INDEX NAME)



● HCl

RN 88519-19-1 CAPLUS

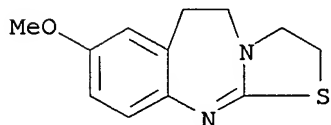
CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-8-propoxy-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 88519-25-9 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-8-methoxy-,  
monohydrochloride (9CI) (CA INDEX NAME)

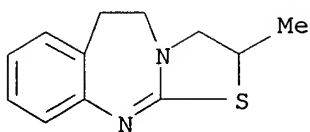


● HCl

RN 88519-30-6 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-2-methyl-,  
monohydrochloride (9CI) (CA INDEX NAME)

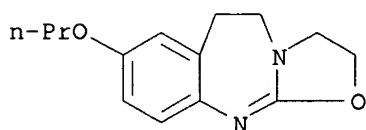
10/019,683



● HCl

RN 88519-34-0 CAPLUS

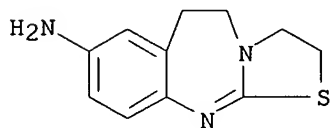
CN Oxazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-8-propoxy-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 88519-41-9 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepin-8-amine, 2,3,5,6-tetrahydro-,  
dihydrochloride (9CI) (CA INDEX NAME)



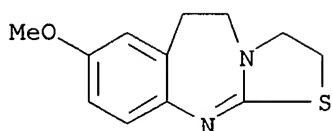
●2 HCl

IT 88519-36-2P

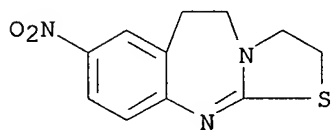
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and demethylation of)

RN 88519-36-2 CAPLUS

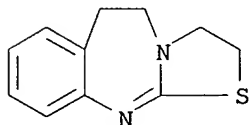
CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-8-methoxy- (9CI)  
(CA INDEX NAME)



IT 88519-40-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reduction of)  
 RN 88519-40-8 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-8-nitro- (9CI) (CA  
 INDEX NAME)

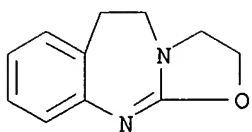


IT 88519-18-0P 88519-20-4P 88519-21-5P  
 88519-22-6P 88519-23-7P 88519-24-8P  
 88519-26-0P 88519-27-1P 88519-28-2P  
 88519-31-7P 88519-32-8P 88519-33-9P  
 88519-35-1P 88519-37-3P 88519-38-4P  
 88519-39-5P 88519-42-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 88519-18-0 CAPLUS  
 CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro- (9CI) (CA INDEX  
 NAME)



RN 88519-20-4 CAPLUS  
 CN Oxazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-, monohydrochloride  
 (9CI) (CA INDEX NAME)

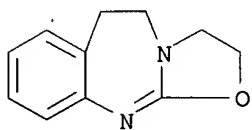
10/019,683



● HCl

RN 88519-21-5 CAPLUS

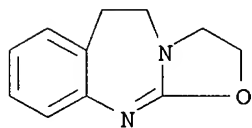
CN Oxazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-, monohydriodide (9CI) (CA INDEX NAME)



● HI

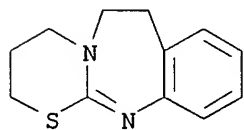
RN 88519-22-6 CAPLUS

CN Oxazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro- (9CI) (CA INDEX NAME)



RN 88519-23-7 CAPLUS

CN 2H-[1,3]Thiazino[2,3-b][1,3]benzodiazepine, 3,4,6,7-tetrahydro-, monohydrochloride (9CI) (CA INDEX NAME)



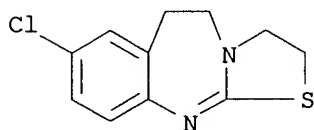
● HCl

RN 88519-24-8 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 8-chloro-2,3,5,6-tetrahydro-,

10/019,683

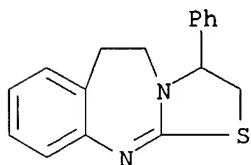
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 88519-26-0 CAPLUS

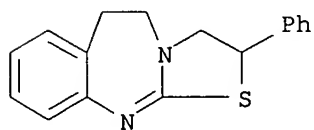
CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-3-phenyl-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 88519-27-1 CAPLUS

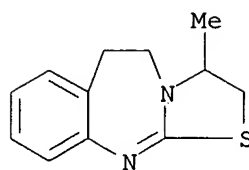
CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-2-phenyl-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 88519-28-2 CAPLUS

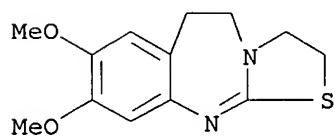
CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-3-methyl-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 88519-31-7 CAPLUS

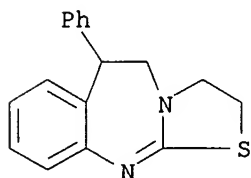
CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-8,9-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 88519-32-8 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-6-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

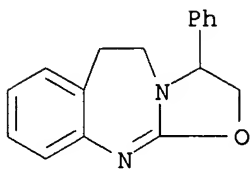


● HCl

RN 88519-33-9 CAPLUS

CN Oxazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-3-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

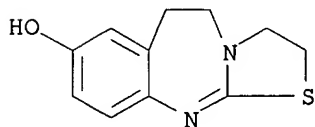




● HCl

RN 88519-35-1 CAPLUS

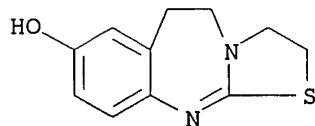
CN Thiazolo[2,3-b][1,3]benzodiazepin-8-ol, 2,3,5,6-tetrahydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 88519-37-3 CAPLUS

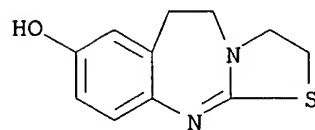
CN Thiazolo[2,3-b][1,3]benzodiazepin-8-ol, 2,3,5,6-tetrahydro-, monohydrobromide (9CI) (CA INDEX NAME)



● HBr

RN 88519-38-4 CAPLUS

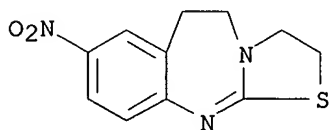
CN Thiazolo[2,3-b][1,3]benzodiazepin-8-ol, 2,3,5,6-tetrahydro- (9CI) (CA INDEX NAME)



RN 88519-39-5 CAPLUS

10/019,683

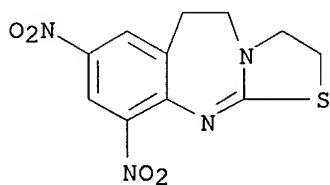
CN   Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-8-nitro-,  
monohydrochloride (9CI)   (CA INDEX NAME)



● HCl

RN   88519-42-0   CAPLUS

CN   Thiazolo[2,3-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-8,10-dinitro- (9CI)  
(CA INDEX NAME)



L14 ANSWER 32 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:85663 CAPLUS

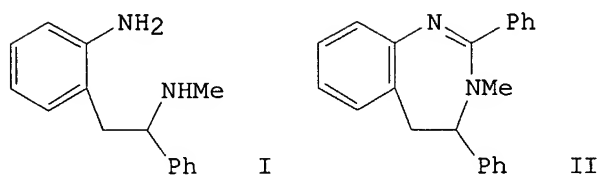
DOCUMENT NUMBER: 100:85663

TITLE: ( $\pm$ )-4-Aryl-4,5-dihydro-3H-1,3-benzodiazepines. 3.  
2-Phenyl and 2-amino analogs as potential  
antihypertensive agentsAUTHOR(S): Setescak, Linda L.; Dekow, Frederick W.; Kitzen, Jan  
M.; Martin, Lawrence L.CORPORATE SOURCE: Dep. Chem. Res., Hoechst-Roussel Pharm., Inc.,  
Somerville, NJ, 08876, USASOURCE: Journal of Medicinal Chemistry (1984), 27(3), 401-4  
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



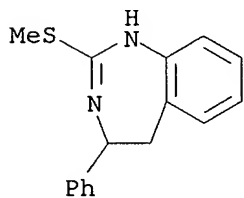
AB A series of 2-phenyl- and 2-amino-4-aryl-4,5-dihydro-3H-1,3-benzodiazepines was prepared by cyclization of diamines, e.g. I, with orthoesters and submitted for broad biol. screening, including evaluation for potential antihypertensive activity. ( $\pm$ )-4,5-Dihydro-2,4-diphenyl-3-methyl-3H-1,3-benzodiazepine hydrochloride (II) was the most active member of the series in the spontaneously hypertensive rat model, producing a 56-mm decrease in systolic blood pressure at 50 mg/kg orally. The synthesis of II analogs containing nuclear substituents in the 4-Ph moiety resulted in a marked decrease of antihypertensive activity. It was not possible to improve on the antihypertensive properties of II through further synthetic modifications.

IT 88057-63-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and antihypertensive activity of)

RN 88057-63-0 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-4-phenyl- (9CI) (CA  
INDEX NAME)



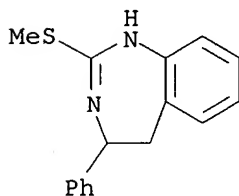
10/019,683

IT 88057-51-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction with methylpiperazine or morpholine and  
antihypertensive activity of)

RN 88057-51-6 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-4-phenyl-,  
monohydriodide (9CI) (CA INDEX NAME)



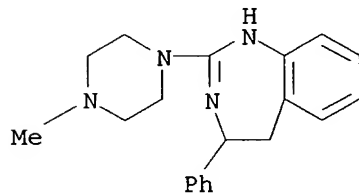
● HI

IT 88057-52-7P 88057-53-8P 88057-55-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

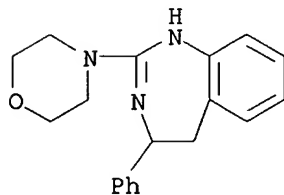
RN 88057-52-7 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(4-methyl-1-piperazinyl)-4-phenyl-  
(9CI) (CA INDEX NAME)



RN 88057-53-8 CAPLUS

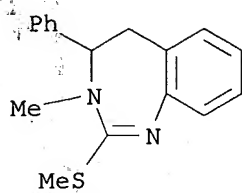
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(4-morpholinyl)-4-phenyl- (9CI) (CA  
INDEX NAME)



RN 88057-55-0 CAPLUS

CN 3H-1,3-Benzodiazepine, 4,5-dihydro-3-methyl-2-(methylthio)-4-phenyl-,  
monohydriodide (9CI) (CA INDEX NAME)

10/019,683



● HI

~~114~~ ANSWER 33 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1983:558476 CAPLUS

DOCUMENT NUMBER: 99:158476

TITLE: Imidazobenzodiazepines, pharmaceutical preparations containing these compounds and their therapeutic use

INVENTOR(S): Vlattas, Isidoros

PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Switz.

SOURCE: Eur. Pat. Appl., 56 pp.

CODEN: EPXXDW

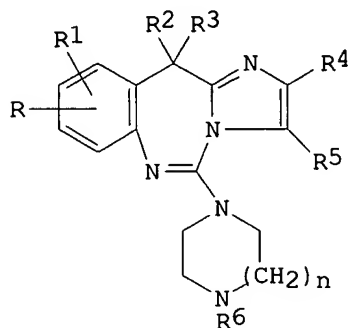
DOCUMENT TYPE: Patent

LANGUAGE: German

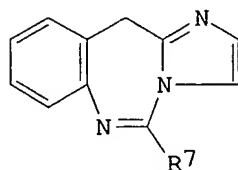
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 81461	A2	19830615	EP 1982-810516	19821201
EP 81461	A3	19840718		
R: AT, BE, CH, DE, FR, IT, LI, LU, NL, SE				
US 4459232	A	19840710	US 1982-417746	19820913
US 4460508	A	19840717	US 1982-417747	19820913
FI 8204170	A	19830608	FI 1982-4170	19821103
GB 2115407	A1	19830907	GB 1982-34334	19821202
GB 2115407	B2	19850724		
ES 517912	A1	19841201	ES 1982-517912	19821203
CA 1180011	A1	19841225	CA 1982-416953	19821203
DK 8205402	A	19830608	DK 1982-5402	19821206
NO 8204090	A	19830608	NO 1982-4090	19821206
AU 8291315	A1	19830616	AU 1982-91315	19821206
JP 58109489	A2	19830629	JP 1982-212828	19821206
ZA 8208954	A	19830928	ZA 1982-8954	19821206
DD 203547	A5	19831026	DD 1982-245615	19821206
HU 27368	O	19831028	HU 1982-3911	19821206
HU 187191	B	19851128		
ES 530125	A1	19851101	ES 1984-530125	19840228
PRIORITY APPLN. INFO.:			US 1981-328274	A 19811207
OTHER SOURCE(S):	CASREACT 99:158476; MARPAT 99:158476			
GI				



I



II

AB The title compds. (I; R, R1, R4-R6 = H, alkyl, alkenyl, alkanoyl, halo,

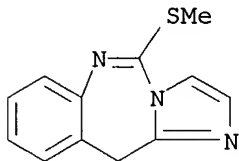
cyano, alkoxy carbonyl, alkylthio, sulfamoyl, etc.; R<sub>2</sub>, R<sub>3</sub> = H, alkyl, n = 1, 2) and their oxides and quaternary derivs. were prepared. Thus, 2-MeC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub> was condensed with (CO<sub>2</sub>Et)<sub>2</sub> and treated with HONH<sub>2</sub>.HCl to give 2-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>C(:NOH)CO<sub>2</sub>Et. This was saponified, decarboxylated, and dehydrated to give 2-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CN, which was treated with EtOH to give 2-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>C(:NH)CO<sub>2</sub>Et. This was cyclocondensed with H<sub>2</sub>NCH<sub>2</sub>CH(OMe)<sub>2</sub> to give 2-(2-nitrobenzyl)-1H-imidazole, which was treated with CSCl<sub>2</sub> and methylated to give II (R<sub>7</sub> = MeS). This was condensed with 1-methylpiperazine to give II (R<sub>7</sub> = 4-methyl-1-piperazinyl). I are effective tranquilizers at 10-30 mg/kg orally.

IT 87081-83-2P 87081-92-3P 87081-98-9P  
87082-08-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and condensation of, with piperazine)

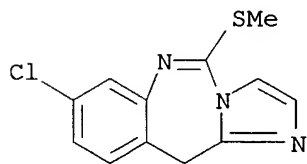
RN 87081-83-2 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(methylthio)- (9CI) (CA INDEX NAME)



RN 87081-92-3 CAPLUS

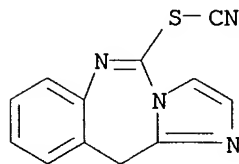
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 8-chloro-5-(methylthio)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 87081-98-9 CAPLUS

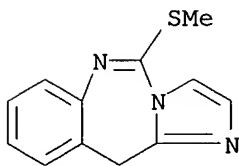
CN Thiocyanic acid, 11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl ester (9CI)  
(CA INDEX NAME)



RN 87082-08-4 CAPLUS

10/019,683

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(methylthio)-, hydrochloride  
(9CI) (CA INDEX NAME)



●x HCl

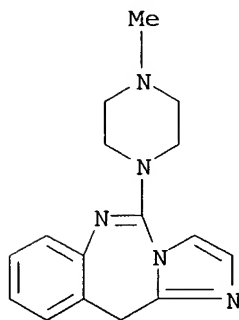
IT 87081-84-3P 87081-85-4P 87082-04-0P

87082-05-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and tranquilizer activity of)

RN 87081-84-3 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)- (9CI)  
(CA INDEX NAME)



RN 87081-85-4 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)-,  
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

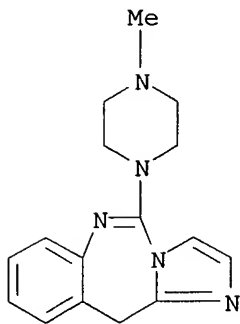
CM 1

CRN 87081-84-3

CMF C16 H19 N5



10/019,683

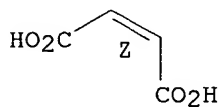


CM 2

CRN 110-16-7

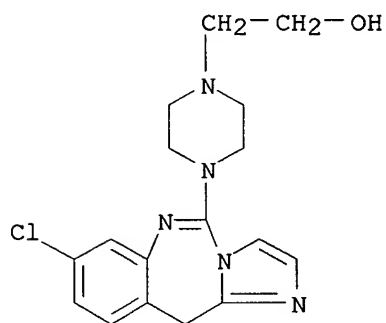
CMF C4 H4 O4

Double bond geometry as shown.



RN 87082-04-0 CAPLUS

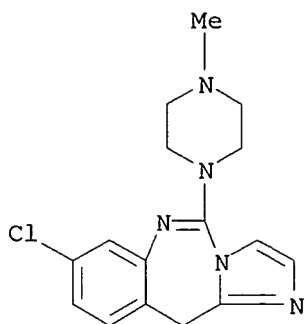
CN 1-Piperazineethanol, 4-(8-chloro-11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

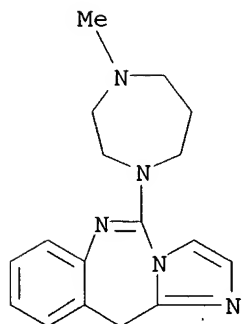
RN 87082-05-1 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 8-chloro-5-(4-methyl-1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



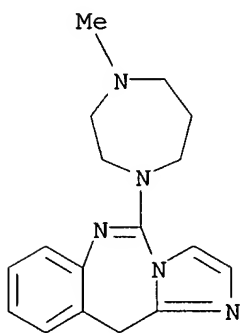
●2 HCl

IT 87081-94-5P 87081-95-6P 87082-00-6P  
 87082-03-9P 87082-06-2P 87082-07-3P  
 87082-09-5P 87082-10-8P 87082-11-9P  
 87082-12-0P 87082-14-2P 87082-17-5P  
 87092-49-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 87081-94-5 CAPLUS  
 CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(hexahydro-4-methyl-1H-1,4-  
 diazepin-1-yl)- (9CI) (CA INDEX NAME)



RN 87081-95-6 CAPLUS  
 CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(hexahydro-4-methyl-1H-1,4-  
 diazepin-1-yl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 87081-94-5  
 CMF C17 H21 N5

10/019,683

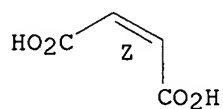


CM 2

CRN 110-16-7

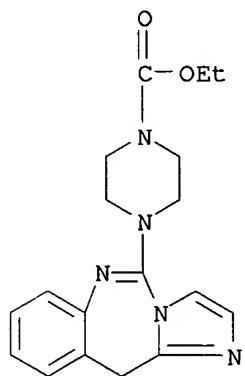
CMF C4 H4 O4

Double bond geometry as shown.



RN 87082-00-6 CAPLUS

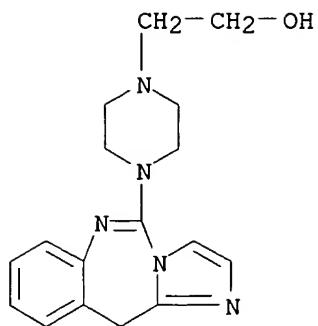
CN 1-Piperazinecarboxylic acid, 4-(11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 87082-03-9 CAPLUS

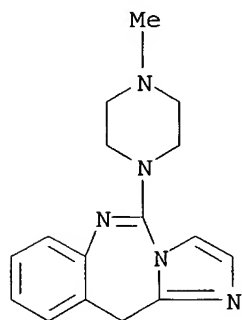
CN 1-Piperazineethanol, 4-(11H-imidazo[1,2-c][1,3]benzodiazepin-5-yl)- (9CI) (CA INDEX NAME)

10/019,683



RN 87082-06-2 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)

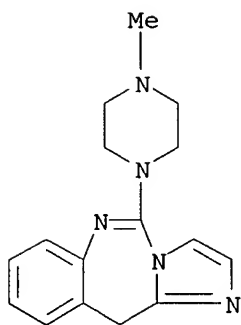


●2 HCl

RN 87082-07-3 CAPLUS

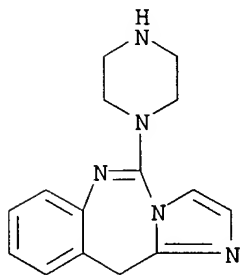
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

10/019,683

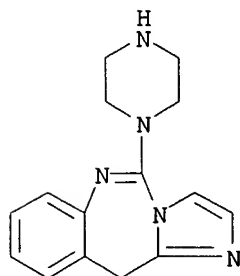


● HCl

RN 87082-09-5 CAPLUS  
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 87082-10-8 CAPLUS  
CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 87082-11-9 CAPLUS

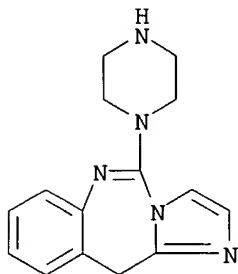
10/019,683

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(1-piperazinyl)-,  
(2Z)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 87082-09-5

CMF C15 H17 N5

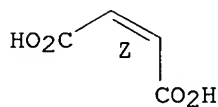


CM 2

CRN 110-16-7

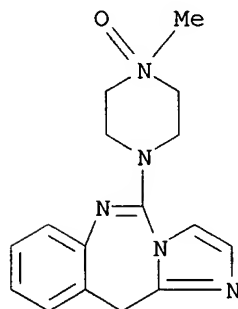
CMF C4 H4 O4

Double bond geometry as shown.



RN 87082-12-0 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-4-oxido-1-piperazinyl)-,  
, hydrochloride (9CI) (CA INDEX NAME)

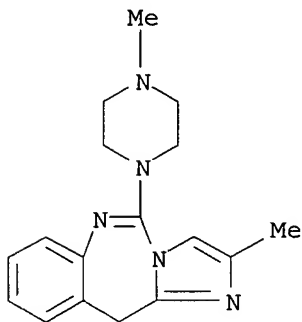


●x HCl

RN 87082-14-2 CAPLUS

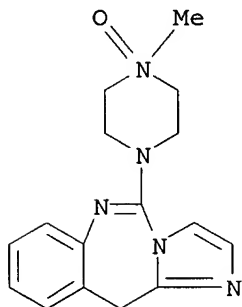
10/019,683

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)-  
(9CI) (CA INDEX NAME)



RN 87082-17-5 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 5-(4-methyl-4-oxido-1-piperazinyl)-  
(9CI) (CA INDEX NAME)



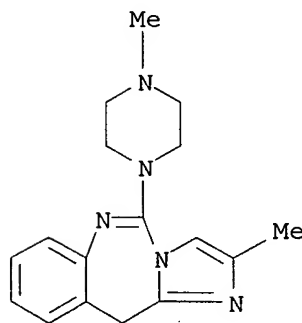
RN 87092-49-7 CAPLUS

CN 11H-Imidazo[1,2-c][1,3]benzodiazepine, 2-methyl-5-(4-methyl-1-piperazinyl)-  
, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 87082-14-2

CMF C17 H21 N5



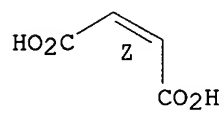
10/019,683

CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.





10/019,683

~~LI~~ ANSWER 34 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1983:16653 CAPLUS

DOCUMENT NUMBER: 98:16653

TITLE: Cyclic guanidines

AUTHOR(S): Ognor, J. I.

CORPORATE SOURCE: Fac. Pharm., Univ. Benin, Benin City, Nigeria

SOURCE: Nigerian Journal of Pharmacy (1982), 13(3), 30-6

CODEN: NJPHDZ; ISSN: 0331-670X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 4-RC6H4NHC(NR1R2):NCH2CH:CH2 (R = H, Me, Cl; NR1R2 = piperidino, morpholino, 4-methylpiperazino) were cyclized by polyphosphoric acid to give quinazoline and benzodiazepines and in a few cases 3,4-dihydroquinazolines.

IT 84006-85-9P 84006-86-0P 84006-92-8P

84006-93-9P 84006-94-0P 84006-95-1P

84007-01-2P 84007-02-3P 84007-03-4P

84007-04-5P 84007-12-5P 84007-13-6P

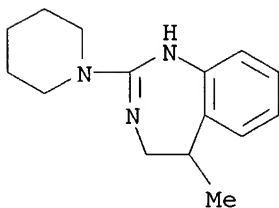
84007-16-9P 84007-17-0P 84007-20-5P

84007-21-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

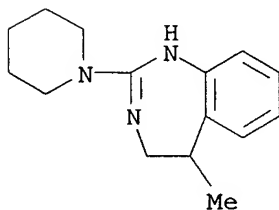
RN 84006-85-9 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-methyl-2-(1-piperidinyl)- (9CI) (CA INDEX NAME)



RN 84006-86-0 CAPLUS

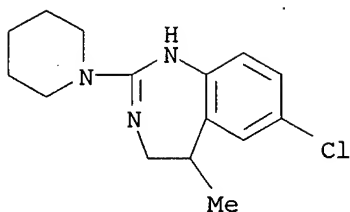
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-methyl-2-(1-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 84006-92-8 CAPLUS

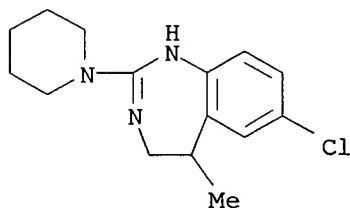
CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-5-methyl-2-(1-piperidinyl)- (9CI) (CA INDEX NAME)



RN 84006-93-9 CAPLUS  
 CN Chromate(1-), diamminetetakis(thiocyanato-N)-, (OC-6-11)-, hydrogen, compd. with 7-chloro-4,5-dihydro-5-methyl-2-(1-piperidinyl)-1H-1,3-benzodiazepine (1:1) (9CI) (CA INDEX NAME)

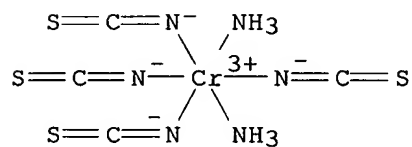
CM 1

CRN 84006-92-8  
 CMF C15 H20 Cl N3



CM 2

CRN 16925-04-5  
 CMF C4 H6 Cr N6 S4 . H  
 CCI CCS



● H<sup>+</sup>

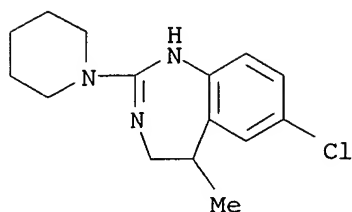
RN 84006-94-0 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-5-methyl-2-(1-piperidinyl)-, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84006-92-8

10/019,683

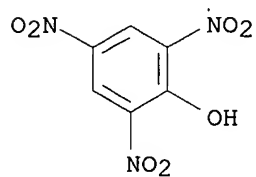
CMF C15 H20 Cl N3



CM 2

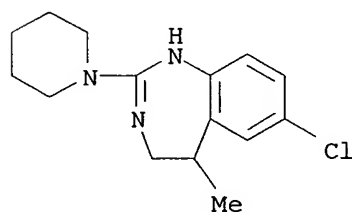
CRN 88-89-1

CMF C6 H3 N3 O7



RN 84006-95-1 CAPLUS

CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-5-methyl-2-(1-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

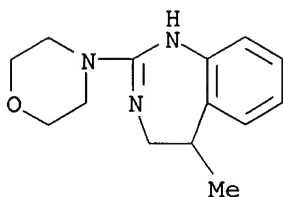


● HCl

RN 84007-01-2 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-methyl-2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

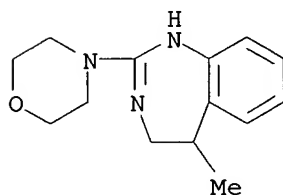
10/019,683



RN 84007-02-3 CAPLUS  
CN Chromate(1-), diamminetetrakis(thiocyanato-N)-, (OC-6-11)-, hydrogen,  
compd. with 4,5-dihydro-5-methyl-2-(4-morpholinyl)-1H-1,3-benzodiazepine  
(1:1) (9CI) (CA INDEX NAME)

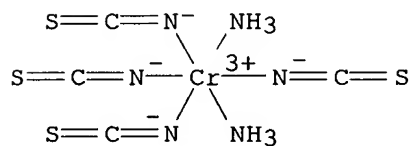
CM 1

CRN 84007-01-2  
CMF C14 H19 N3 O



CM 2

CRN 16925-04-5  
CMF C4 H6 Cr N6 S4 . H  
CCI CCS



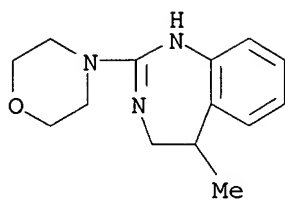
● H<sup>+</sup>

RN 84007-03-4 CAPLUS  
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-methyl-2-(4-morpholinyl)-, compd.  
with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84007-01-2  
CMF C14 H19 N3 O

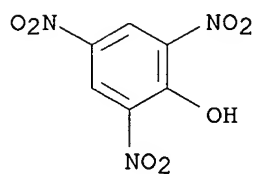
10/019,683



CM 2

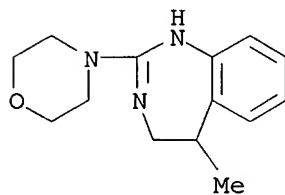
CRN 88-89-1

CMF C6 H3 N3 O7



RN 84007-04-5 CAPLUS

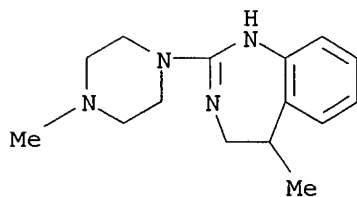
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-methyl-2-(4-morpholinyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 84007-12-5 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-methyl-2-(4-methyl-1-piperazinyl)-  
(9CI) (CA INDEX NAME)



10/019,683

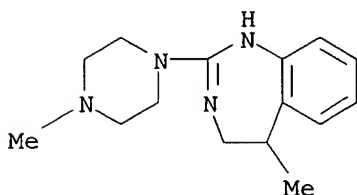
RN 84007-13-6 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5-methyl-2-(4-methyl-1-piperazinyl)-, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 84007-12-5

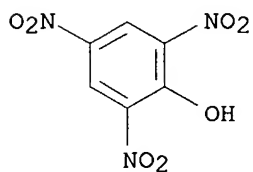
CMF C15 H22 N4



CM 2

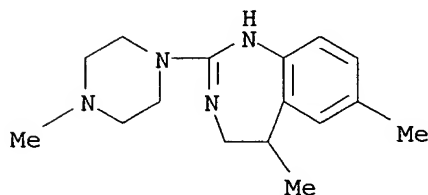
CRN 88-89-1

CMF C6 H3 N3 O7



RN 84007-16-9 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5,7-dimethyl-2-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 84007-17-0 CAPLUS

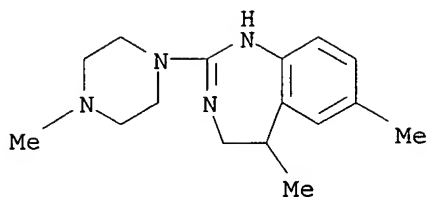
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-5,7-dimethyl-2-(4-methyl-1-piperazinyl)-, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 84007-16-9

CMF C16 H24 N4

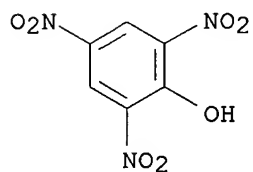
10/019,683



CM 2

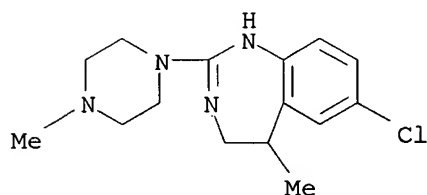
CRN 88-89-1

CMF C6 H3 N3 O7



RN 84007-20-5 CAPLUS

CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-5-methyl-2-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



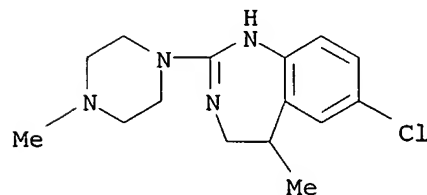
RN 84007-21-6 CAPLUS

CN 1H-1,3-Benzodiazepine, 7-chloro-4,5-dihydro-5-methyl-2-(4-methyl-1-piperazinyl)-, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 84007-20-5

CMF C15 H21 Cl N4

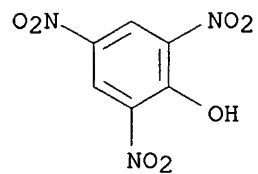


10/019,683

CM 2

CRN 88-89-1

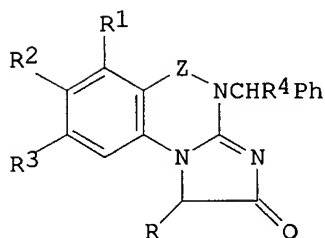
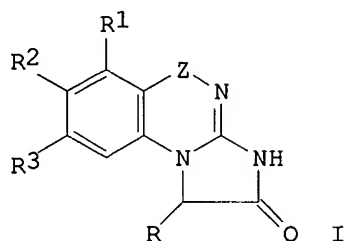
CMF C6 H3 N3 O7



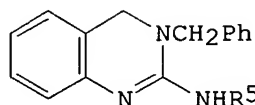


L14 ANSWER 35 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1981:532958 CAPLUS  
 DOCUMENT NUMBER: 95:132958  
 TITLE: Tricyclic compounds  
 PATENT ASSIGNEE(S): Daiichi Seiyaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56029591	A2	19810324	JP 1979-104818	19790817
JP 62047186	B4	19871006		
PRIORITY APPLN. INFO.:			JP 1979-104818	A 19790817
GI				



II



III

AB I (R = H, Me; R1 = H, Cl; R2 = H, Me, MeO; R3 = H, MeO; Z = CH2, CHMe, CH2CH2) or I.HCl were prepared by catalytic hydrogenation of II (R4 = H, Ph) or by heating II (R4 = Ph) with HCl in EtOH-H2O. Thus, 2.42 g III (R5 = H), 3.5 g Et3N, and 2.26 g ClCH2COCl in CHCl3 were stirred 1 h at room temperature to give III (R5 = COCH2Cl), which (1.26 g) was stirred with 0.56 g EtONa in EtOH for 2 h at room temperature to give II (R - R4 = H, Z = CH2)

(IV).

Hydrogenolysis of 1.20 g IV with concentrated HCl and 1.5 g 5% Pd-C in MeOH gave

I.HCl (R - R4 = H, Z = CH2). Some of I had blood platelet aggregation inhibiting activity with EC50 of 0.07-12.0 (collagen) and 5.8-82 (ADP).

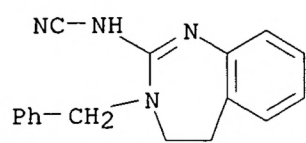
IT 75594-96-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

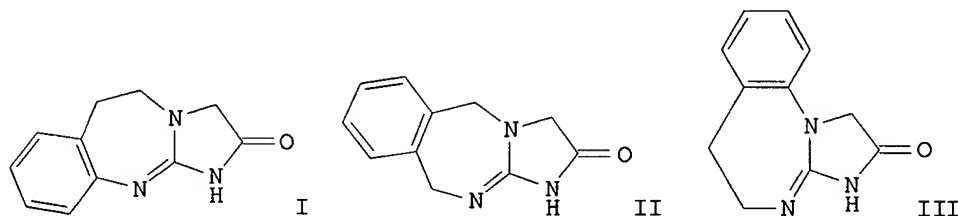
RN 75594-96-6 CAPLUS

CN Cyanamide, [4,5-dihydro-3-(phenylmethyl)-3H-1,3-benzodiazepin-2-yl]- (9CI)  
 (CA INDEX NAME)

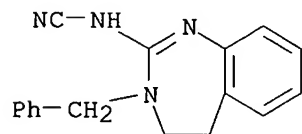
10/019,683



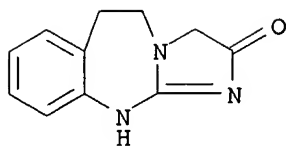
L14 ANSWER 36 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1980:620706 CAPLUS  
 DOCUMENT NUMBER: 93:220706  
 TITLE: Cyclic guanidines. VIII. Synthesis of imidazo-1,3- and -2,4-benzodiazepine derivatives as blood platelet aggregation inhibitors  
 AUTHOR(S): Ishikawa, Fumiyoshi; Watanabe, Yoshifumi  
 CORPORATE SOURCE: Res. Inst., Daiichi Seiyaku Co., Ltd., Tokyo, 132, Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1980), 28(4), 1307-10  
 CODEN: CPBTAL; ISSN: 0009-2363  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Imidazo[2,1-b][1,3]- and -[2,4]benzodiazepin-2-ones I and II, and imidazo[1,2-a][1,3]benzodiazepin-2-one III were prepared as ring expansion analogs of a known aggregation inhibitor. III had potent activity, but I and II had little or no activity, resp.  
 IT 75594-96-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and condensation of, with Et bromoacetate)  
 RN 75594-96-6 CAPLUS  
 CN Cyanamide, [4,5-dihydro-3-(phenylmethyl)-3H-1,3-benzodiazepin-2-yl]- (9CI)  
 (CA INDEX NAME)

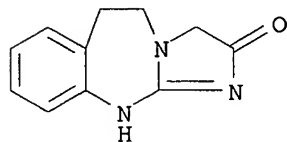


IT 75595-05-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 75595-05-0 CAPLUS  
 CN 1H-Imidazo[2,1-b][1,3]benzodiazepin-2(3H)-one, 5,6-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 75594-94-4P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as blood platelet aggregation inhibitor)  
RN 75594-94-4 CAPLUS  
CN 1H-Imidazo[2,1-b][1,3]benzodiazepin-2(3H)-one, 5,6-dihydro- (9CI) (CA INDEX NAME)



~~LA~~ ANSWER 37 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1980:198369 CAPLUS

DOCUMENT NUMBER: 92:198369

TITLE: Heterocyclic systems containing bridgehead nitrogen atom. XXXVI. Syntheses of dibenzo[d,f]1,3-diazepino[2,1:2',3']thiazolo[4',5'-b]quinoxaline, quinolino[3,2:5',4']thiazolo[3',2'-a]benzimidazole and 3-arylthiazolo[3,2-a]perimidine

AUTHOR(S): Gupta, V. K.; Sachdeva, M. L.; Dhaka, K. S.; Chadha, V. K.; Pujari, H. K.

CORPORATE SOURCE: Dep. Chem., Kurukshetra Univ., Kurukshetra, India

SOURCE: Annales de la Societe Scientifique de Bruxelles, Serie 1: Sciences Mathematiques, Astronomiques et Physiques (1979), 93(2), 137-41

CODEN: ASSBAH; ISSN: 0037-959X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 92:198369

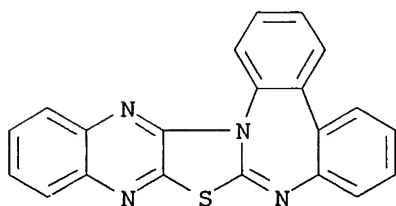
AB Dibenzo[df]-1,3-diazepino[2,1:2',3']thiazolo[4',5'-b]quinoxaline was prepared by treating 1H-dibenzo[d,f]-1,3-diazepine-2-thione with 2,3-dichloroquinoxaline. Quinolino[3,2:5',4']thiazolo[3',2'-a]benzimidazole was prepared by the condensation of thiazolo[3,2-a]benzimidazol-3(2H)-one with 2-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHO, followed by reductive cyclization. The reaction of 2-mercaptoperimidine with  $\alpha$ -halo ketones and subsequent cyclization with polyphosphoric acid of the intermediate 2-arylmethylthioperimidines, yields 3-arylthiazolo[3,2-a]perimidines.

IT 73216-76-9P

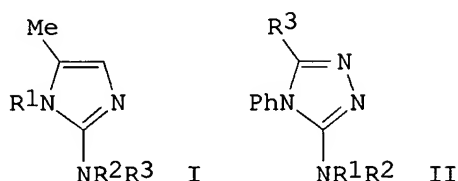
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 73216-76-9 CAPLUS

CN Dibenzo[4',5':6',7'] [1,3]diazepino[2',1':2,3]thiazolo[4,5-b]quinoxaline (9CI) (CA INDEX NAME)



~~IA~~ ANSWER 38 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1979:132750 CAPLUS  
 DOCUMENT NUMBER: 90:132750  
 TITLE: Synthesis and pharmacological study of  
 2-aminoimidazoles and 3-amino-s-triazoles  
 AUTHOR(S): Maffrand, Jean Pierre; Pereillo, Jean Marie; Eloy,  
 Fernand; Aubert, Daniel; Rolland, Francoise;  
 Barthelemy, Gerard  
 CORPORATE SOURCE: Dep. Rech. Dev., PARCOPR, Toulouse, Fr.  
 SOURCE: European Journal of Medicinal Chemistry (1978), 13(5),  
 469-74  
 CODEN: EJMCA5; ISSN: 0009-4374  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 GI



AB Twenty-three 2-amino-5-methylimidazoles (I; R1 = Me, allyl, Ph, or substituted Ph; R2 = H or Me, R3 = Ph or substituted Ph, or NR2R3 = N-containing heterocycle) were prepared by condensation of propargylamine [2450-71-7] with the appropriate isothioureas R1N=C(SMe)NR2R3 and spontaneous cyclization of the intermediate N-propargylguanidines. Similarly, sixteen 2-aminoimidazoles were prepared by condensation of the isothioureas with aminoacetaldehyde dimethylacetal [22483-09-6]. Ten isosteric 3-amino-s-triazoles (II; NR1R2 = diethylamino or N-containing heterocycle; R3 = Me or aryl) were prepared by condensation of PhN=C(SMe)NR1R2 with R3CONHNH2. Pharmacol. testing showed 4 I to have central nervous-stimulant activity. The most active was 5-methyl-1-phenyl-2-(1-pyrrolidinyl)imidazole (III) [57962-60-4], which was devoid of group toxicity in mice. III increased spontaneous motor activity, did not potentiate apomorphine-induced stereotyped behavior, and shortened barbiturate-induced sleeping times. III promoted escape activity in mice, did not produce tolerance in rats, and had sympathomimetic activity in dogs.

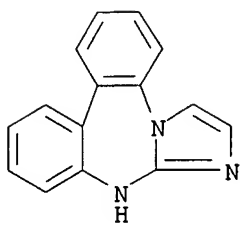
IT 69584-20-9P 69584-21-0P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (preparation and pharmacol. of)

RN 69584-20-9 CAPLUS

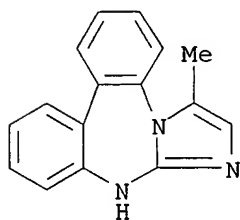
CN 8H-Dibenz[d,f]imidazo[1,2-a][1,3]diazepine (9CI) (CA INDEX NAME)

10/019,683



RN 69584-21-0 CAPLUS

CN 8H-Dibenz[d,f]imidazo[1,2-a][1,3]diazepine, 6-methyl- (9CI) (CA INDEX NAME)



10/019,683

LI4 ANSWER 39 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1977:171493 CAPLUS

DOCUMENT NUMBER: 86:171493

TITLE: 2-Amino-1-(2-bromo-3-substituted phenyl)pyridinium compounds

INVENTOR(S): Yale, Harry L.; Petigara, Ramesh B.

PATENT ASSIGNEE(S): E. R. Squibb and Sons, Inc., USA

SOURCE: U.S., 22 pp. Division of U.S. 3,957,787.

CODEN: USXXAM

DOCUMENT TYPE: Patent

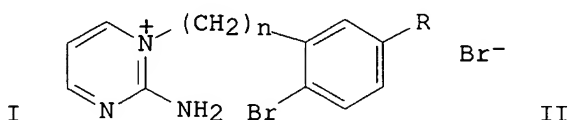
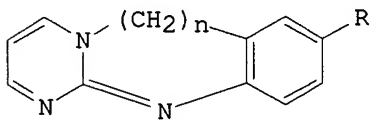
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4001233	A	19770104	US 1976-651390	19760122
US 3868374	A	19750225	US 1973-382804	19730726
US 3957787	A	19760518	US 1974-532796	19741216
PRIORITY APPLN. INFO.:			US 1973-382804	A3 19730726
			US 1974-532796	A3 19741216

GI



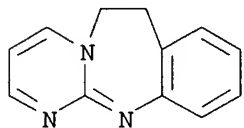
AB Pyrimido[2,1-b][1,3]benzodiazepine I (R = H, n = 2) and pyrimido[2,1-b][1,3]benzodiazocine I (R = MeS, n = 3) useful as central nervous system stimulants and muscle relaxants (no data), were prepared by cyclization of pyrimidinium bromides II. Thus, 9 g II (R = H, n = 2) in DMF was treated with 10.3 g K<sub>2</sub>CO<sub>3</sub> and 0.5 g Cu bronze and the mixture heated 7 days at 100° to give 7.2 g I (R = H, n = 2). Refluxing a mixture of 212 g 2-BrC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>Br and 121 g 2-aminopyrimidine in xylene for 3 h gave 170 g II (R = H, n = 2).

IT 56119-83-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 56119-83-6 CAPLUS

CN Pyrimido[2,1-b][1,3]benzodiazepine, 6,7-dihydro- (9CI) (CA INDEX NAME)





10/019,683

✓  
LHA ANSWER 40 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1976:560142 CAPLUS

DOCUMENT NUMBER: 85:160142

TITLE: 1,2-Dihydro-2-imino-1-(bromophenylalkyl)pyrimidines

INVENTOR(S): Yale, Harry L.; Petigara, Ramesh B.

PATENT ASSIGNEE(S): E. R. Squibb and Sons, Inc., USA

SOURCE: U.S., 17 pp. Division of U.S. 3,868,374.

CODEN: USXXAM

DOCUMENT TYPE: Patent

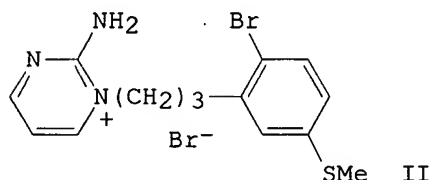
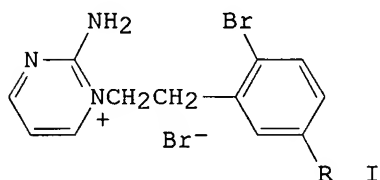
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3957787	A	19760518	US 1974-532796	19741216
US 3868374	A	19750225	US 1973-382804	19730726
US 4001233	A	19770104	US 1976-651390	19760122
PRIORITY APPLN. INFO.:			US 1973-382804	A3 19730726
			US 1974-532796	A3 19741216

GI



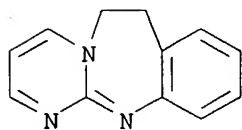
AB Phenethylpyrimidinium bromides I (R = H, Cl, SO<sub>2</sub>NEt<sub>2</sub>, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NPr<sub>2</sub>) were prepared by brominating 2,5-Br(R)C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>OH, treating 2,5-Br(R)C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>Br with NaCN, ethanolysis of 2,5-Br(R)C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CN, reduction of 2,5-Br(R)C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CO<sub>2</sub>Et, bromination of 2,5-Br(R)C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>OH, and reaction of 2,5-Br(R)C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>Br with 2-aminopyrimidine. I are bactericides with min. inhibitory concns. against Staphylococcus aureus of 3.13-12.5 γ/ml and are cyclized by Cu bronze-K<sub>2</sub>CO<sub>3</sub> to pyrimidobenzodiazepines. The pyrimidinium salt II was similarly prepared and cyclized.

IT 56119-83-6P

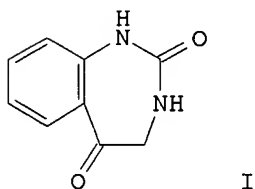
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 56119-83-6 CAPLUS

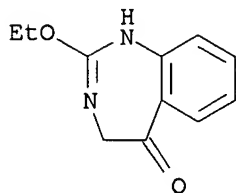
CN Pyrimido[2,1-b][1,3]benzodiazepine, 6,7-dihydro- (9CI) (CA INDEX NAME)



L14 ANSWER 41 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1976:508614 CAPLUS  
 DOCUMENT NUMBER: 85:108614  
 TITLE: Synthesis of some 1H-1,3-benzodiazepines  
 AUTHOR(S): Taylor, John B.; Tully, W. Roger  
 CORPORATE SOURCE: Roussel Lab. Ltd., Swindon, UK  
 SOURCE: Journal of the Chemical Society, Perkin Transactions  
 1: Organic and Bio-Organic Chemistry (1972-1999)  
 (1976), (12), 1331-8  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 85:108614  
 GI



AB 3,4-Dihydro-1H-1,3-benzodiazepine-2,5-dione (I) was prepared from o-nitroacetophenone. The critical step was the reaction of 2,2'-diaminoacetophenone with 1,1'-carbonyldiimidazole to give 77% N-(o-aminophenacylaminoacetyl)imidazole which cyclized readily in hot H<sub>2</sub>O to give 88% I. The reactivity at positions 2, 5, and 7 was investigated. Attempts to introduce a 4,5-double bond resulted in rearrangement to quinolines and indoles.  
 IT 60330-92-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reactions of)  
 RN 60330-92-9 CAPLUS  
 CN 5H-1,3-Benzodiazepin-5-one, 2-ethoxy-1,4-dihydro-, monohydrochloride (9CI)  
 (CA INDEX NAME)



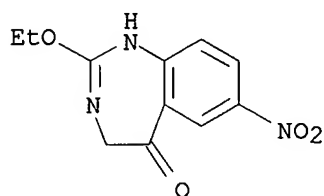
● HCl

IT 60330-97-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reduction of) ...

RN 60330-97-4 CAPLUS

CN 5H-1,3-Benzodiazepin-5-one, 2-ethoxy-1,4-dihydro-7-nitro- (9CI) (CA INDEX  
NAME)

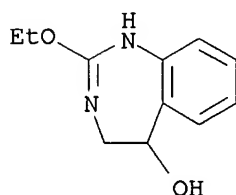


IT 60330-61-2P 60330-62-3P 60330-63-4P  
60330-64-5P 60330-65-6P 60330-66-7P  
60330-67-8P 60330-68-9P 60330-69-0P  
60330-70-3P 60330-71-4P 60330-72-5P  
60330-73-6P 60330-74-7P 60330-75-8P  
60330-76-9P 60330-77-0P 60330-79-2P  
60330-80-5P 60330-81-6P 60330-82-7P  
60360-75-0P 60407-42-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 60330-61-2 CAPLUS

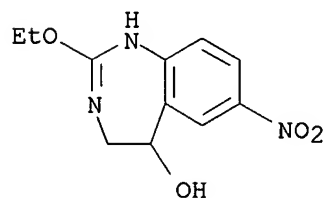
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-, monohydrochloride (9CI)  
(CA INDEX NAME)



● HCl

RN 60330-62-3 CAPLUS

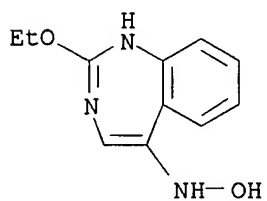
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-7-nitro- (9CI) (CA INDEX  
NAME)



10/019,683

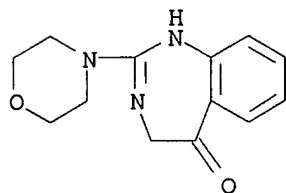
RN 60330-63-4 CAPLUS

CN 1H-1,3-Benzodiazepin-5-amine, 2-ethoxy-N-hydroxy- (9CI) (CA INDEX NAME)



RN 60330-64-5 CAPLUS

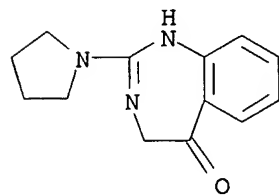
CN 5H-1,3-Benzodiazepin-5-one, 1,4-dihydro-2-(4-morpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

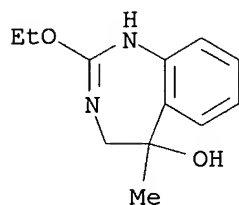
RN 60330-65-6 CAPLUS

CN 5H-1,3-Benzodiazepin-5-one, 1,4-dihydro-2-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



RN 60330-66-7 CAPLUS

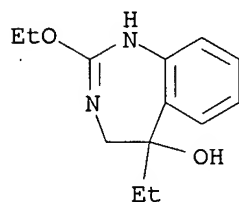
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 60330-67-8 CAPLUS

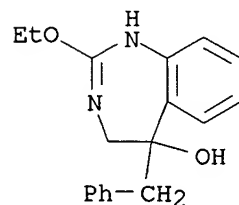
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-5-ethyl-4,5-dihydro-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 60330-68-9 CAPLUS

CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-(phenylmethyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)

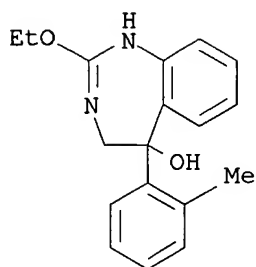


● HCl

RN 60330-69-0 CAPLUS

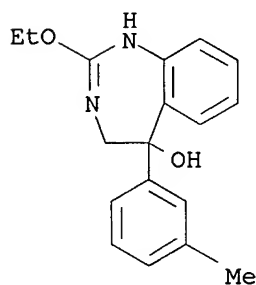
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-(2-methylphenyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)

10/019,683



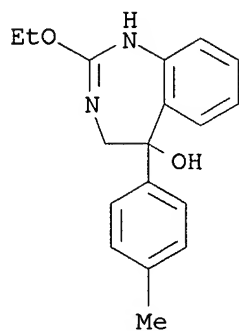
● HCl

RN 60330-70-3 CAPLUS  
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-(3-methylphenyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

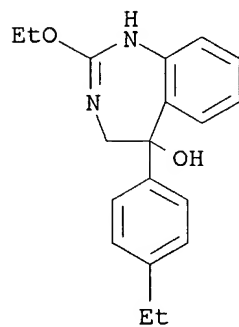
RN 60330-71-4 CAPLUS  
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-(4-methylphenyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 60330-72-5 CAPLUS

CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-5-(4-ethylphenyl)-4,5-dihydro-,  
monohydrochloride (9CI) (CA INDEX NAME)

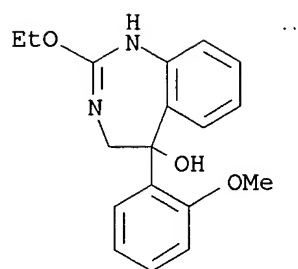


● HCl

RN 60330-73-6 CAPLUS

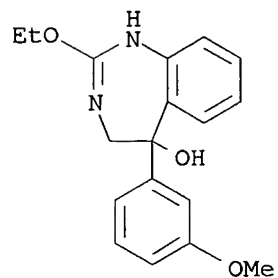
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-(2-methoxyphenyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)

10/019,683



● HCl

RN 60330-74-7 CAPLUS  
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-(3-methoxyphenyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)

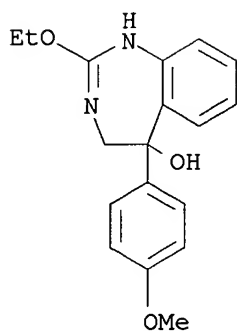


● HCl

RN 60330-75-8 CAPLUS  
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-(4-methoxyphenyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



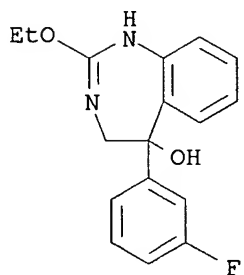
10/019,683



● HCl

RN 60330-76-9 CAPLUS

CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-5-(3-fluorophenyl)-4,5-dihydro-,  
monohydrochloride (9CI) (CA INDEX NAME)

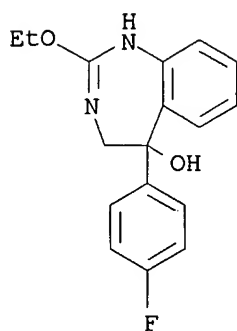


● HCl

RN 60330-77-0 CAPLUS

CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-5-(4-fluorophenyl)-4,5-dihydro-,  
monohydrochloride (9CI) (CA INDEX NAME)

10/019,683

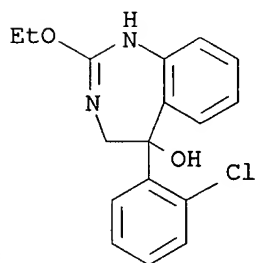


● HCl

RN 60330-79-2 CAPLUS  
CN 1H-1,3-Benzodiazepin-5-ol, 5-(2-chlorophenyl)-2-ethoxy-4,5-dihydro-,  
sulfate (1:1) (salt) (9CI) (CA INDEX NAME)

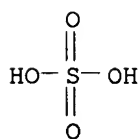
CM 1

CRN 60330-78-1  
CMF C17 H17 Cl N2 O2



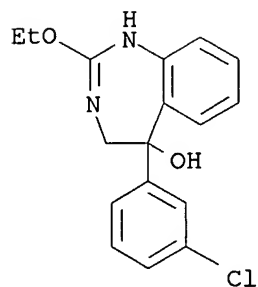
CM 2

CRN 7664-93-9  
CMF H2 O4 S



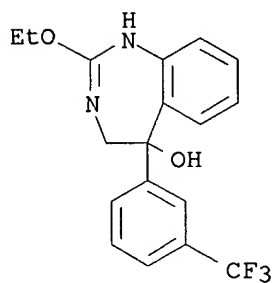
RN 60330-80-5 CAPLUS  
CN 1H-1,3-Benzodiazepin-5-ol, 5-(3-chlorophenyl)-2-ethoxy-4,5-dihydro-,  
monohydrochloride (9CI) (CA INDEX NAME)

10/019,683



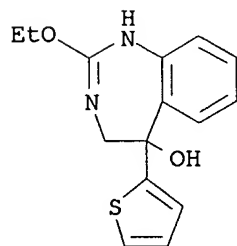
● HCl

RN 60330-81-6 CAPLUS  
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-[3-(trifluoromethyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 60330-82-7 CAPLUS  
CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-(2-thienyl)-, monohydrochloride (9CI) (CA INDEX NAME)

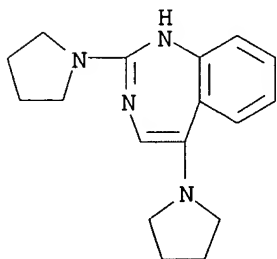


● HCl

10/019,683

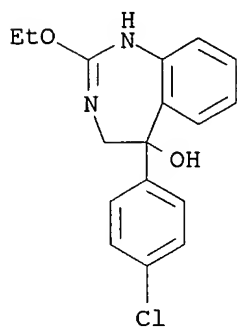
RN 60360-75-0 CAPLUS

CN 1H-1,3-Benzodiazepine, 2,5-di-1-pyrrolidinyl- (9CI) (CA INDEX NAME)



RN 60407-42-3 CAPLUS

CN 1H-1,3-Benzodiazepin-5-ol, 5-(4-chlorophenyl)-2-ethoxy-4,5-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

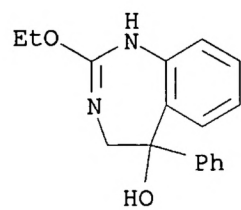
IT 60331-00-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation, rearrangement, and decomposition of)

RN 60331-00-2 CAPLUS

CN 1H-1,3-Benzodiazepin-5-ol, 2-ethoxy-4,5-dihydro-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

10/019,683

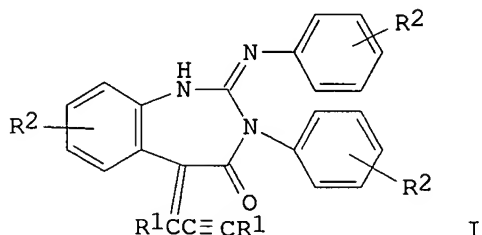


● HCl

10/019,683

LP4 ANSWER 42 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
X  
ACCESSION NUMBER: 1976:121912 CAPLUS  
DOCUMENT NUMBER: 84:121912  
TITLE: 1,3-Benzodiazepine derivatives  
INVENTOR(S): Agawa, Toshio; Ohshiro, Yoshiki; Baba, Akio;  
Matsumoto, Masaru  
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 50121290	A2	19750923	JP 1974-28412	19740312
PRIORITY APPLN. INFO.: GI			JP 1974-28412 A	19740312

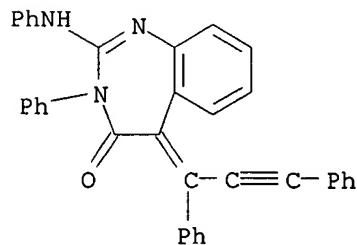


AB 1,3-Benzodiazepines I (R1 = aryl; R2 = H, alkyl) were prepared by reaction of acetylenes R1C.tplbond.CX (X = halo) with carbodiimides R2C6H4N:C:NC6H4R2 in the presence of Fe(CO)5. Thus, a mixture of Fe(CO)5 and PhN:C:NPh was heated, PhC.tplbond.CBr added, and the mixture stirred to give 40% I (R1 = Ph, R2 = H). I (R1 = Ph; R2 = 7-Me, 4'-Me, 4''-Me and R2 = 9-Me, 2'-Me, 2''-Me) were also prepared

IT 56185-26-3P 58678-50-5P 58678-51-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 56185-26-3 CAPLUS

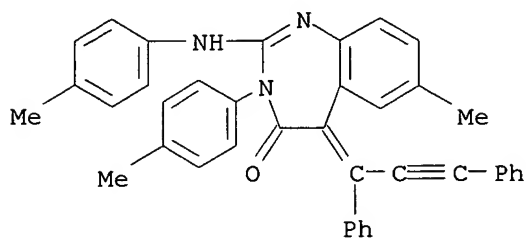
CN 4H-1,3-Benzodiazepin-4-one, 5-(1,3-diphenyl-2-propynylidene)-3,5-dihydro-3-phenyl-2-(phenylamino)- (9CI) (CA INDEX NAME)



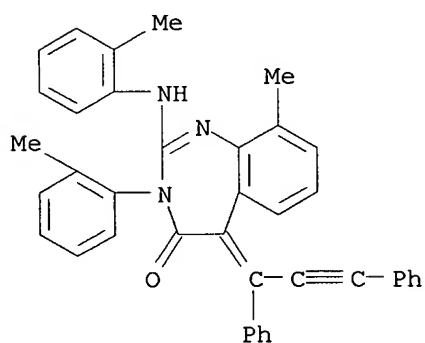
RN 58678-50-5 CAPLUS

10/019,683

CN 4H-1,3-Benzodiazepin-4-one, 5-(1,3-diphenyl-2-propynylidene)-1,2,3,5-tetrahydro-7-methyl-3-(4-methylphenyl)-2-[(4-methylphenyl)imino]- (9CI)  
(CA INDEX NAME)

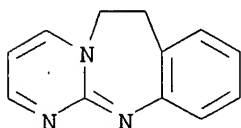


RN 58678-51-6 CAPLUS  
CN 4H-1,3-Benzodiazepin-4-one, 5-(1,3-diphenyl-2-propynylidene)-1,2,3,5-tetrahydro-9-methyl-3-(2-methylphenyl)-2-[(2-methylphenyl)imino]- (9CI)  
(CA INDEX NAME)

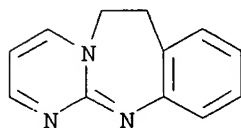


10/019,683

~~L1~~ ANSWER 43 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1976:59373 CAPLUS  
DOCUMENT NUMBER: 84:59373  
TITLE: 6,7-Dihydropyrimido[2,1-b][1,3]benzodiazepine  
AUTHOR(S): Yale, Harry L.; Bennett, C. R.; Petigara, R. B.  
CORPORATE SOURCE: Squibb Inst. Med. Res., Princeton, NJ, USA  
SOURCE: Journal of Heterocyclic Chemistry (1975), 12(5),  
1053-4  
CODEN: JHTCAD; ISSN: 0022-152X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI For diagram(s), see printed CA Issue.  
AB 2-Aminopyrimidine was treated with o-BrC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>Br to give I, which was  
cyclized with copper bronze to give II.  
IT 56119-83-6P 58061-91-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 56119-83-6 CAPLUS  
CN Pyrimido[2,1-b][1,3]benzodiazepine, 6,7-dihydro- (9CI) (CA INDEX NAME)



RN 58061-91-9 CAPLUS  
CN Pyrimido[2,1-b][1,3]benzodiazepine, 6,7-dihydro-, monohydrochloride (9CI)  
(CA INDEX NAME)



● HCl



14 ANSWER 44 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975:479208 CAPLUS

DOCUMENT NUMBER: 83:79208

TITLE: Reactions of phenylbromoacetylene with heterocumulenes in the presence of iron pentacarbonyl

AUTHOR(S): Baba, Akio; Ohshiro, Yoshiki; Agawa, Toshio

CORPORATE SOURCE: Fac. Eng., Osaka Univ., Suita, Japan

SOURCE: Journal of Organometallic Chemistry (1975), 87(2), 247-56

CODEN: JORCAI; ISSN: 0022-328X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 83:79208

GI For diagram(s), see printed CA Issue.

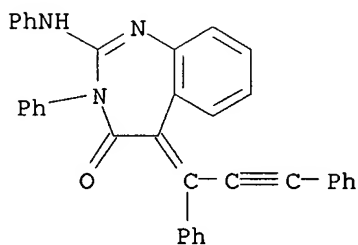
AB Reactions of  $\text{PhC.tplbond.CBr7}$  with  $\text{RN:C:NR1}$  in the presence of iron pentacarbonyl gave diazepinone derivs. I ( $\text{R} = \text{Ph}$ ,  $\text{R1} = \text{H}$ ;  $\text{R} = \text{p-MeC}_6\text{H}_4$ ,  $\text{R1} = 4\text{-Me}$ ;  $\text{R} = \text{o-MeC}_6\text{H}_4$ ,  $\text{R1} = 2\text{-Me}$ ) in 41-17% yields. The reaction with  $\text{PhNCO}$  gave two hydantoin derivs. II ( $\text{R} = \text{H}$ ,  $\text{PhC.tplbond.C}$ ) (8 and 18% resp.). The reaction with  $\text{PhC:C:O}$  was not catalyzed by iron pentacarbonyl and gave 2-bromo-3,4-diphenyl-1-diphenylacetoxynaphthalene. In all cases coupling of  $\text{PhC.tplbond.CBr7}$  gave diphenylbutadiyne.

IT 56185-26-3P 56185-27-4P 56185-28-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

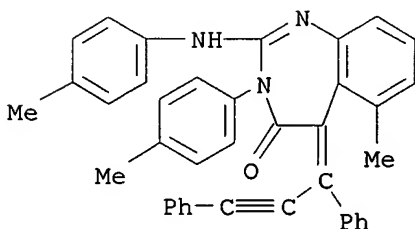
RN 56185-26-3 CAPLUS

CN 4H-1,3-Benzodiazepin-4-one, 5-(1,3-diphenyl-2-propynylydene)-3,5-dihydro-3-phenyl-2-(phenylamino)- (9CI) (CA INDEX NAME)



RN 56185-27-4 CAPLUS

CN 4H-1,3-Benzodiazepin-4-one, 5-(1,3-diphenyl-2-propynylydene)-3,5-dihydro-6-methyl-3-(4-methylphenyl)-2-[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

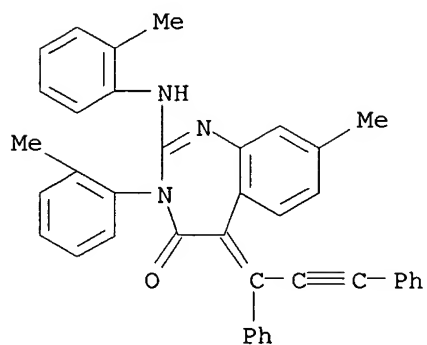


RN 56185-28-5 CAPLUS

CN 4H-1,3-Benzodiazepin-4-one, 5-(1,3-diphenyl-2-propynylydene)-3,5-dihydro-8-

10/019,683

methyl-3-(2-methylphenyl)-2-[(2-methylphenyl)amino]- (9CI) (CA INDEX  
NAME)



10/019,683

104 ANSWER 45 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975:458862 CAPLUS

DOCUMENT NUMBER: 83:58862

TITLE: Therapeutic compounds and intermediates

INVENTOR(S): Yale, Harry L.; Petigara, Ramesh B.

PATENT ASSIGNEE(S): E. R. Squibb and Sons, Inc., USA

SOURCE: U.S., 16 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3868374	A	19750225	US 1973-382804	19730726
CA 1051885	A1	19790403	CA 1974-203632	19740628
GB 1474252	A	19770518	GB 1974-29534	19740703
DE 2435384	A1	19750213	DE 1974-2435384	19740723
FR 2238490	A1	19750221	FR 1974-26129	19740726
FR 2238490	B1	19780630		
JP 50041894	A2	19750416	JP 1974-86509	19740726
US 3957787	A	19760518	US 1974-532796	19741216
US 4001233	A	19770104	US 1976-651390	19760122
PRIORITY APPLN. INFO.:			US 1973-382804	A 19730726
			US 1974-532796	A3 19741216

GI For diagram(s), see printed CA Issue.

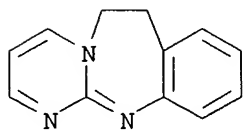
AB Pyrimidobenzodiazepine I (R = H, n = 2) and pyrimidobenzodiazocine I (R = MeS, n = 3), useful as central nervous system stimulants and muscle relaxants (no data), were prepared by cyclization of pyrimidinium bromide II. Thus, 2-BrC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>OH underwent successively bromination, cyanation, hydrolysis, reduction with LiAlH<sub>4</sub>, and bromination to give 2-BrC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>Br which after condensation with 2-aminopyrimidine (III) gave II (R = H, n = 2) (IV). Cyclization by heating IV in presence of K<sub>2</sub>CO<sub>3</sub> and copper bronze gave I (R = H, n = 2). Similarly cyclization of II (R = MeS, n = 3) (V) gave I (R = MeS, n = 3). The Grignard reaction of 2,5-Br(MeS)C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>Br with ethylene oxide followed by bromination and condensation with III gave V.

IT 56119-83-6P 56119-84-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 56119-83-6 CAPLUS

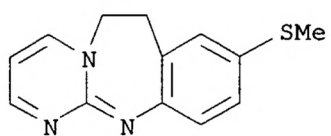
CN Pyrimido[2,1-b][1,3]benzodiazepine, 6,7-dihydro- (9CI) (CA INDEX NAME)



RN 56119-84-7 CAPLUS

CN Pyrimido[2,1-b][1,3]benzodiazepine, 6,7-dihydro-9-(methylthio)- (9CI) (CA INDEX NAME)

10/019,683



L14 ANSWER 46 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975:73041 CAPLUS  
 DOCUMENT NUMBER: 82:73041  
 TITLE: 2-(Substituted anilino)-4,5-dihydro-3H-1,3-benzodiazepines  
 INVENTOR(S): Suh, John T.; Schnettler, Richard A.  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3849400	A	19741119	US 1972-268127	19720630
PRIORITY APPLN. INFO.:			US 1972-268127	A 19720630

GI For diagram(s), see printed CA Issue.

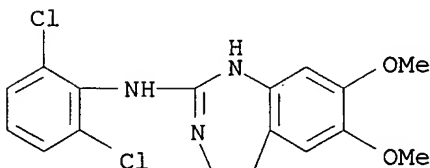
AB Benzodiazepines I (R = H, OMe; R1 = 2,6-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, 2-CF<sub>3</sub>C<sub>6</sub>H<sub>4</sub>, 4-ClC<sub>6</sub>H<sub>4</sub>) were prepared by treating the aminophenethylamines II with RN:CCl<sub>2</sub>. I were central nervous depressants in mice at 10 mg/kg i.p. and lowered the blood pressure in cats at 10 mg/kg i.v.

IT 55474-29-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and pharmacol. activity)

RN 55474-29-8 CAPLUS

CN 3H-1,3-Benzodiazepin-2-amine, N-(2,6-dichlorophenyl)-4,5-dihydro-7,8-dimethoxy- (9CI) (CA INDEX NAME)

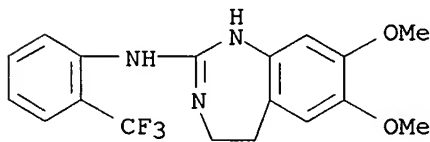


IT 55474-32-3P 55474-33-4P 55474-34-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and pharmacol. activity of)

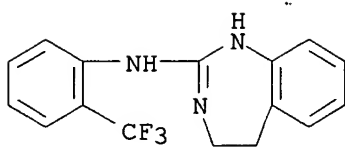
RN 55474-32-3 CAPLUS

CN 3H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-7,8-dimethoxy-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



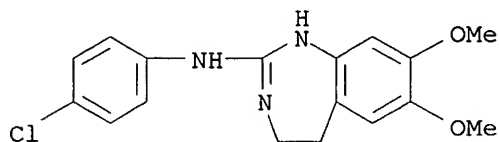
RN 55474-33-4 CAPLUS

CN 3H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 55474-34-5 CAPLUS

CN 3H-1,3-Benzodiazepin-2-amine, N-(4-chlorophenyl)-4,5-dihydro-7,8-dimethoxy- (9CI) (CA INDEX NAME)

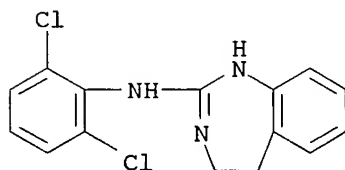


IT 55474-30-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 55474-30-1 CAPLUS

CN 3H-1,3-Benzodiazepin-2-amine, N-(2,6-dichlorophenyl)-4,5-dihydro- (9CI)  
(CA INDEX NAME)



L14 ANSWER 47 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975:4327 CAPLUS  
 DOCUMENT NUMBER: 82:4327  
 TITLE: 2-Heterocyclic-1,3-benzodiazepines  
 INVENTOR(S): Suh, John T.; Schnettler, Richard A.  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3838122	A	19740924	US 1972-268128	19720630
PRIORITY APPLN. INFO.:			US 1972-268128	A 19720630

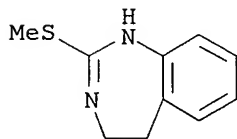
GI For diagram(s), see printed CA Issue.

AB The benzodiazepines I (R = MeS, morpholino, 4-methyl-1-piperazinyl  
 1-pyrrolidinyl, etc.; R1 = H, MeO) were prepared Thus, 2,4,5-  
 O2N(MeO)2C6H2CH2CH2NH2 was hydrogenated and treated with CS2 to give  
 7,8-dimethoxy-2,3,4,5-tetrahydro-1H-1,3-benzodiazepine-2-thione, which was  
 methylated with MeI and the resulting I (R = MeS, R1 = MeO). HI treated  
 with morpholine to give I (R = morpholino, R1 = MeO). At 30-300 mg/kg I  
 were muscle relaxants and at 10 mg/kg were antihypertensives.

IT 54047-05-1P 54047-07-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction with amines)

RN 54047-05-1 CAPLUS

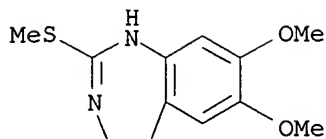
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-, hydriodide (9CI) (CA  
 INDEX NAME)



●x HI

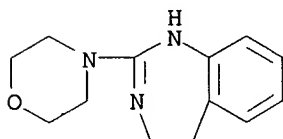
RN 54047-07-3 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-2-(methylthio)-,  
 hydriodide (9CI) (CA INDEX NAME)



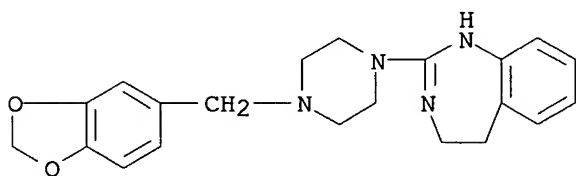
●x HI

IT 54047-01-7P 54047-02-8P 54047-03-9P  
 54047-04-0P 54047-06-2P 54047-08-4P  
 54047-09-5P 54047-10-8P 54047-11-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 54047-01-7 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(4-morpholinyl)-, hydriodide (9CI)  
 (CA INDEX NAME)



●x HI

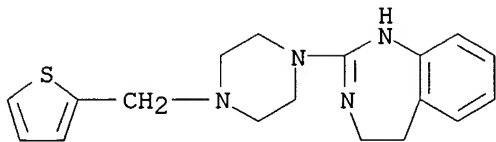
RN 54047-02-8 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 2-[4-(1,3-benzodioxol-5-ylmethyl)-1-piperazinyl]-  
 4,5-dihydro-, hydriodide (9CI) (CA INDEX NAME)



●x HI

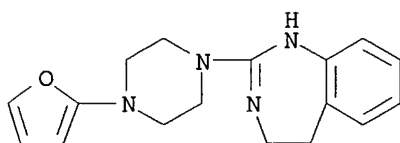
RN 54047-03-9 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-[4-(2-thienylmethyl)-1-piperazinyl]-,  
 hydriodide (9CI) (CA INDEX NAME)





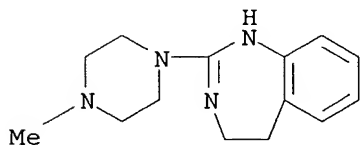
●x HI

RN 54047-04-0 CAPLUS  
CN 1H-1,3-Benzodiazepine, 2-[4-(2-furanyl)-1-piperazinyl]-4,5-dihydro-,  
hydriodide (9CI) (CA INDEX NAME)



●x HI

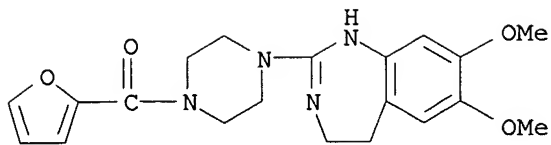
RN 54047-06-2 CAPLUS  
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(4-methyl-1-piperazinyl)-, hydriodide  
(9CI) (CA INDEX NAME)



●x HI

RN 54047-08-4 CAPLUS  
CN Piperazine, 1-(4,5-dihydro-7,8-dimethoxy-1H-1,3-benzodiazepin-2-yl)-4-(2-  
furanylcarbonyl)-, hydriodide (9CI) (CA INDEX NAME)

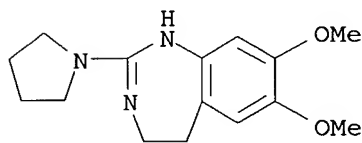
10/019,683



●x HI

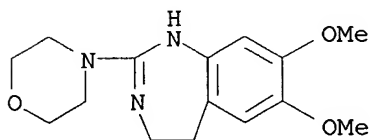
RN 54047-09-5 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-2-(1-pyrrolidinyl)- (9CI)  
(CA INDEX NAME)



RN 54047-10-8 CAPLUS

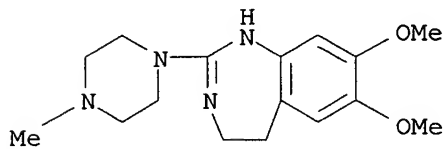
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-2-(4-morpholinyl)-,  
hydriodide (9CI) (CA INDEX NAME)



●x HI

RN 54047-11-9 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-2-(4-methyl-1-piperazinyl)-, hydriodide (9CI) (CA INDEX NAME)



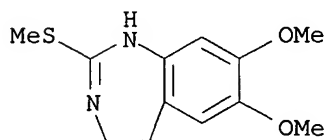
●x HI

L14 ANSWER 48 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1974:83080 CAPLUS  
 DOCUMENT NUMBER: 80:83080  
 TITLE: 2-(Aralkylamino)-4,5-dihydro-3H-1,3-benzodiazepines  
 INVENTOR(S): Suh, John T.; Schnettler, Richard A.  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

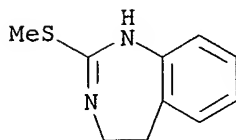
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3780023	A	19731218	US 1972-268129	19720630
PRIORITY APPLN. INFO.:			US 1972-268129	A 19720630

GI For diagram(s), see printed CA Issue.  
 AB The benzodiazepines I (R = PhCH<sub>2</sub>CH<sub>2</sub>NH, PhCH<sub>2</sub>NH, 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>NH) were prepared Thus, o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> was treated with CS<sub>2</sub> and the resulting 2,3,4,5-tetrahydro-1H-1,3-benzodiazepine-2-thione methylated with MeI to give I (R = MeS).HI, which with PhCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> gave I (R = PhCH<sub>2</sub>CH<sub>2</sub>NH).HI. At 1-10 mg/kg I (R = PhCH<sub>2</sub>NH) was a tranquilizer. The LD<sub>50</sub> of I were 20 mg/kg.  
 IT 37852-20-3P 52063-46-4P 52063-51-1P  
 52063-52-2P 52063-53-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 37852-20-3 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-2-(methylthio)-, monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 52063-46-4 CAPLUS  
 CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-, monohydriodide (9CI)  
 (CA INDEX NAME)

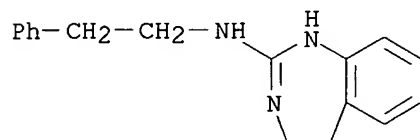


● HI

10/019,683

RN 52063-51-1 CAPLUS

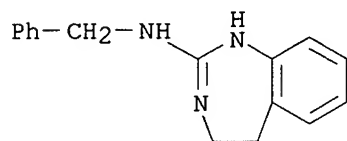
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-(2-phenylethyl)-,  
monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 52063-52-2 CAPLUS

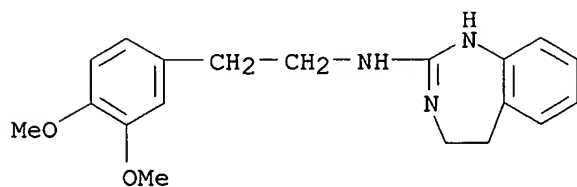
CN 1H-1,3-Benzodiazepin-2-amine, 4,5-dihydro-N-(phenylmethyl)-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 52063-53-3 CAPLUS

CN 1H-1,3-Benzodiazepin-2-amine, N-[2-(3,4-dimethoxyphenyl)ethyl]-4,5-dihydro-  
, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L14 ANSWER 49 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1974:83079 CAPLUS  
 DOCUMENT NUMBER: 80:83079  
 TITLE: 2-(Aminoalkylamino)-4,5-dihydro-3h-1,3-benzodiazepines  
 INVENTOR(S): Suh, John T.; Schnettler, Richard A.  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3780024	A	19731218	US 1972-268130	19720630
PRIORITY APPLN. INFO.:			US 1972-268130	A 19720630

GI For diagram(s), see printed CA Issue.

AB The benzodiazepines I [R = Me<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH, Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>NH, R<sub>1</sub> = H, MeO] were prepared. Thus, 2,4,5-(O<sub>2</sub>N)(MeO)2C<sub>6</sub>H<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> was hydrogenated over PtO and the product treated with CS<sub>2</sub> to give 7,8-dimethoxy-2,3,4,5-tetrahydro-1H-1,3-benzodiazepine-2-thione, which was methylated with MeI and the resulting I (R = SMe, R<sub>1</sub> = MeO). HI treated with Me<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> to give I (R = Me<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH, R<sub>1</sub> = MeO). At 30-300 mg/kg I (R = Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>NH, R<sub>1</sub> = H) (II) caused central nervous system depression. The LD<sub>50</sub> of II was >75 mg/kg. At 10 mg/kg II reduced blood pressure in cats.

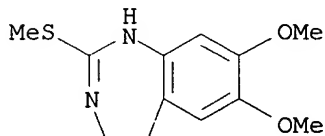
IT 37852-20-3P 52063-46-4P 52063-47-5P

52063-48-6P 52063-49-7P 52063-50-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 37852-20-3 CAPLUS

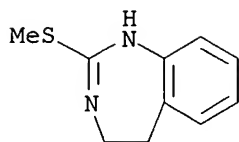
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-2-(methylthio)-,  
 monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 52063-46-4 CAPLUS

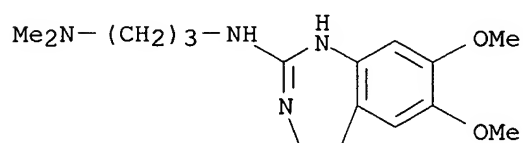
CN 1H-1,3-Benzodiazepine, 4,5-dihydro-2-(methylthio)-, monohydriodide (9CI)  
 (CA INDEX NAME)



● HI

RN 52063-47-5 CAPLUS

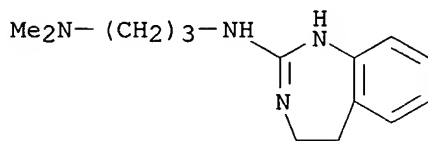
CN 1,3-Propanediamine, N'-(4,5-dihydro-7,8-dimethoxy-1H-1,3-benzodiazepin-2-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 52063-48-6 CAPLUS

CN 1,3-Propanediamine, N'-(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

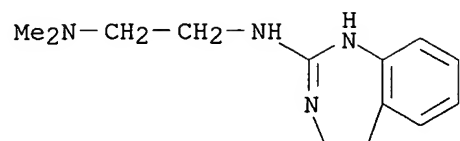


● 2 HCl

RN 52063-49-7 CAPLUS

CN 1,2-Ethanediamine, N'-(4,5-dihydro-1H-1,3-benzodiazepin-2-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

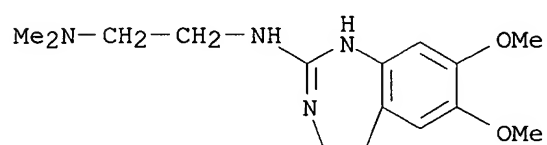
10/019,683



●2 HCl

RN 52063-50-0 CAPLUS

CN 1,2-Ethanediamine, N'-(4,5-dihydro-7,8-dimethoxy-1H-1,3-benzodiazepin-2-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

10/019,683

~~LI4~~ ANSWER 50 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1973:449091 CAPLUS

DOCUMENT NUMBER: 79:49091

TITLE: Amidines. 4. Synthesis of tricyclic guanidines related to 1,2,3,5-tetrahydroimidazo[2,1-b]quinazoline, a new antihypertensive agent

AUTHOR(S): Jen, Timothy; Bender, Paul; Van Hoeven, Helen; Dienel, Barbara; Loev, Bernard

CORPORATE SOURCE: Res. Dev. Div., Smith Kline and French Lab., Philadelphia, PA, USA

SOURCE: Journal of Medicinal Chemistry (1973), 16(4), 407-11  
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 1,2,3,5-Tetrahydroimidazo[2,1-b]quinazoline-HCl (I-HCl) [33376-05-5], 1,2,3,4-tetrahydro-6H-pyrimido[2,1-b]quinazoline-HBr (II-HBr) [41363-26-2], and 2,3-dihydro-1H-imidazo[1,2-a]benzimidazole-HCl (III-HCl) [41363-27-3] showed antihypertensive activity at 2.5, 2, and 10 mg/kg orally, resp., in neurogenic hypertensive dogs. In metacorticoid hypertensive rats, II was less potent than I in lowering systolic pressure.

IT 41921-54-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation and antihypertensive activity of)

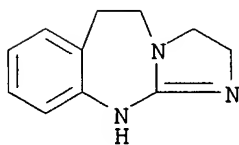
RN 41921-54-4 CAPLUS

CN 1H-Imidazo[2,1-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro-, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 41921-69-1

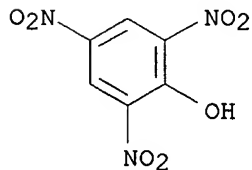
CMF C11 H13 N3



CM 2

CRN 88-89-1

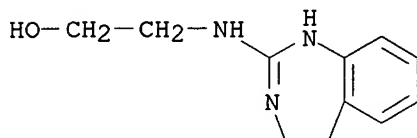
CMF C6 H3 N3 O7





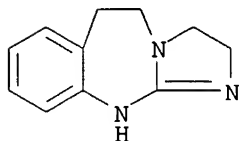
10/019,683

IT 41921-64-6P 41921-69-1P 41968-09-6P  
42075-58-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 41921-64-6 CAPLUS  
CN Ethanol, 2-[(4,5-dihydro-3H-1,3-benzodiazepin-2-yl)amino]-,  
monohydrochloride (9CI) (CA INDEX NAME)

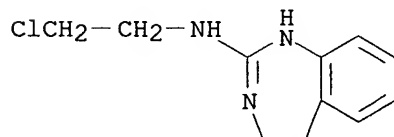


● HCl

RN 41921-69-1 CAPLUS  
CN 1H-Imidazo[2,1-b][1,3]benzodiazepine, 2,3,5,6-tetrahydro- (9CI) (CA INDEX NAME)



RN 41968-09-6 CAPLUS  
CN 3H-1,3-Benzodiazepin-2-amine, N-(2-chloroethyl)-4,5-dihydro-,  
monohydrochloride (9CI) (CA INDEX NAME)



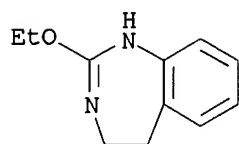
● HCl

RN 42075-58-1 CAPLUS  
CN 3H-1,3-Benzodiazepine, 2-ethoxy-4,5-dihydro-, mono[tetrafluoroborate(1-)]-  
(9CI) (CA INDEX NAME)

CM 1

CRN 48142-00-3  
CMF C11 H14 N2 O

10/019,683

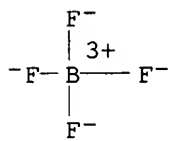


CM 2

CRN 16872-11-0

CMF B F4 . H

CCI CCS



L14 ANSWER 51 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1972:540178 CAPLUS  
 DOCUMENT NUMBER: 77:140178  
 TITLE: Pharmacologically active 1,3-benzodiazepines  
 INVENTOR(S): Rodriguez, Herman Robert; De Stevens, George  
 SOURCE: U.S., 12 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3681340	A	19720801	US 1968-704517	19680212
US 3862228	A	19750121	US 1972-227619	19720218
PRIORITY APPLN. INFO.:			US 1967-630520	A2 19670413
			US 1967-649828	A2 19670629
			US 1968-704517	A2 19680212
			US 1970-10649	A2 19700211

GI For diagram(s), see printed CA Issue.

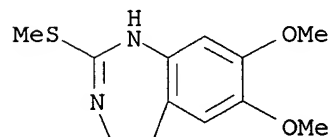
AB The diazepines (I, R = H, MeO, iso-BuO, R1 = e.g., HO, H2N, MeS, HS, MeOCH2, Ph, PhCH2, p-F3-CC6H4, m- or p-ClC6H4, m- or p-FC6H4, R2 = H, Me) and their acid salts, useful as analgesics, tranquilizers, and agents to increase coronary blood flow, are prepared by cyclizing amidines (II, R3 = O2N, H2N). Thus, II (R = MeO, R1 = Ph, R2 = H, R3 = H2N) was refluxed in toluene and treated with HCl-EtOH to give I-HCl. The II are prepared by treating the imidic acids R1C-(:NH)OH with 2,4,5-O2N(MeO)2C6H2CH2CH2NH2-HCl to give the II (R3 = O2N) which are hydrogenated to II (R3 = H2N).

IT 37852-20-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 37852-20-3 CAPLUS

CN 1H-1,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-2-(methylthio)-,  
 monohydriodide (9CI) (CA INDEX NAME)



● HI

10/019,683

~~124~~ ANSWER 52 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1969:524388 CAPLUS

DOCUMENT NUMBER: 71:124388

TITLE: Substituted 1,3-dihydro-4H-furo[3,4-d]-1,3-benzodiazepin-3-ones: synthesis and scope of the method

AUTHOR(S): Venturella, Vincent S.; Watson, Edward John, Jr.

CORPORATE SOURCE: Sch. of Pharm., Temple Univ., Nutley, NJ, USA

SOURCE: Journal of Heterocyclic Chemistry (1969), 6(5), 671-9

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 71:124388

GI For diagram(s), see printed CA Issue.

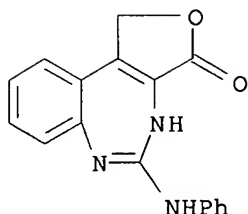
AB The preparation of a series of 1,3-dihydro-4H-furo-[3,4-d]-1,3-benzodiazepin-3-ones (I) was studied. This study and the I prepared tend to illustrate that the limiting factor in the scope of the synthetic method is similar to that noted generally in the Fischer indole synthesis. The lactone ring is relatively stable under a variety of conditions, and is believed to lend ease of formation to the ring system studied.

IT 24188-33-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 24188-33-8 CAPLUS

CN 3H-Furo[3,4-d][1,3]benzodiazepin-3-one, 5-anilino-1,4-dihydro-,  
monohydrochloride (8CI) (CA INDEX NAME)



● HCl

10/019,683

114 ANSWER 53 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1969:491441 CAPLUS

DOCUMENT NUMBER: 71:91441

TITLE: 5,6-Dihydro-6-methylthiazolo-[2,3-b] [1,3] benzodiazepines, 2,3,10, 11-tetrahydro-10-methyl-1H-cyclopenta [4,5]thiazolo[2,3-b][1,3] benzodiazepine, and 7,8,9,10,12,13-hexahydro-13-methylbenzothiazolo[2,3-b][1,3]-benzodiazepine via 1,3,4,5-tetrahydro-5-methyl-2H-1,3-benzodiazepine-2-thione

AUTHOR(S): Elslager, Edward F.; Worth, Donald, F.

CORPORATE SOURCE: Med. and Sci. Affairs Div., Parke, Davis and Co., Ann Arbor, MI, USA

SOURCE: Journal of Heterocyclic Chemistry (1969), 6(4), 491-5  
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 71:91441

GI For diagram(s), see printed CA Issue.

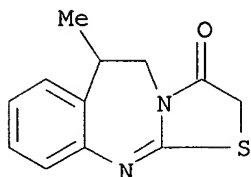
AB Catalytic reductive scission of 4-methylcinnoline with Raney Ni afforded 57% o-amino- $\beta$ -methylphenethylamine, treatment of which with CS<sub>2</sub> followed by thermal cyclization of the product furnished 1,3,4,5-tetrahydro-5-methyl-2H-1,3-benzodiazepine-2-thione (I). Reaction of I with ethyl chloroacetate, ethyl 2-bromohexanoate, ethyl 2-chloroacetoacetate, 2-bromo-2'-methoxyacetophenone, and 2-bromoacetophenone provided a series of substituted 5,6-dihydro-6-methylthiazolo[2,3-b][1,3]benzodiazepines. Condensation of I with 2-chlorocyclopentanone and 2-chlorocyclohexanone gave 2,3,10,11-tetrahydro-10-methyl-1H-cyclopenta[4,5]thiazolo-[2,3-b][1,3]benzodiazepine and 7,8,9,10,12,13-hexahydro-13-methylbenzothiazolo[2,3-b][1,3]benzodiazepine, resp. Structure assignments are discussed. None of the compds. possessed appreciable biol. activity.

IT 23890-69-9P 23890-70-2P 23890-71-3P  
23890-72-4P 23890-73-5P 23890-74-6P  
23890-75-7P 23921-51-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

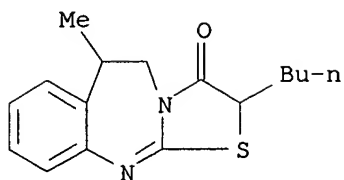
RN 23890-69-9 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepin-3(2H)-one, 5,6-dihydro-6-methyl- (8CI)  
(CA INDEX NAME)



RN 23890-70-2 CAPLUS

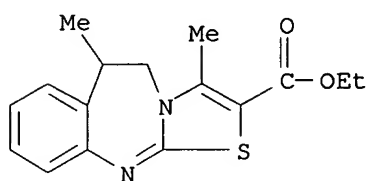
CN Thiazolo[2,3-b][1,3]benzodiazepin-3(2H)-one, 2-butyl-5,6-dihydro-6-methyl-, monohydrochloride (8CI) (CA INDEX NAME)



● HCl

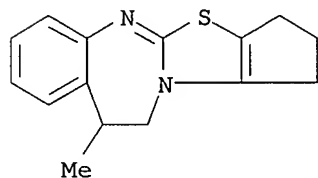
RN 23890-71-3 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine-2-carboxylic acid, 5,6-dihydro-3,6-dimethyl-, ethyl ester (8CI) (CA INDEX NAME)



RN 23890-72-4 CAPLUS

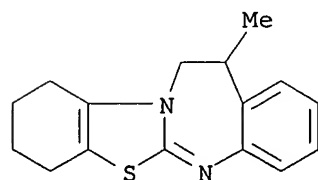
CN 1H-Cyclopenta[4,5]thiazolo[2,3-b][1,3]benzodiazepine, 2,3,10,11-tetrahydro-10-methyl-, hydrochloride (8CI) (CA INDEX NAME)



●x HCl

RN 23890-73-5 CAPLUS

CN Benzothiazolo[2,3-b][1,3]benzodiazepine, 7,8,9,10,12,13-hexahydro-13-methyl- (8CI) (CA INDEX NAME)

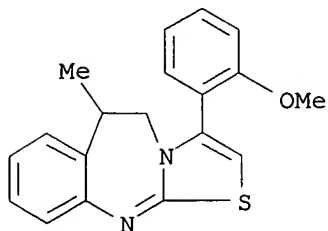


RN 23890-74-6 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-3-(o-methoxyphenyl)-6-

10/019,683

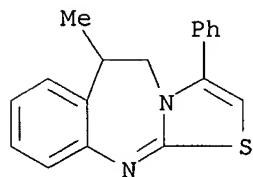
methyl-, monohydrobromide (8CI) (CA INDEX NAME)



● HBr

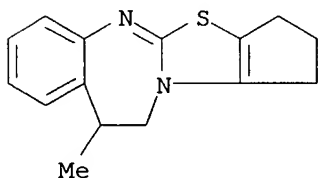
RN 23890-75-7 CAPLUS

CN Thiazolo[2,3-b][1,3]benzodiazepine, 5,6-dihydro-6-methyl-3-phenyl- (8CI)  
(CA INDEX NAME)



RN 23921-51-9 CAPLUS

CN 1H-Cyclopenta[4,5]thiazolo[2,3-b][1,3]benzodiazepine, 2,3,10,11-tetrahydro-10-methyl- (8CI) (CA INDEX NAME)



114 ANSWER 54 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1965:91047 CAPLUS  
 DOCUMENT NUMBER: 62:91047  
 ORIGINAL REFERENCE NO.: 62:16281e-h,16282a-b  
 TITLE: 6-Amino-5H-dibenzo[d,f] [1,3]diazepines  
 INVENTOR(S): Kreighbaum, William E.; Scarborough, Homer C.  
 PATENT ASSIGNEE(S): Mead Johnson & Co.  
 SOURCE: 8 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3177202		19650406	US 1963-316140	19631014
GB 1021941			GB	
PRIORITY APPLN. INFO.:			US	19631014

OTHER SOURCE(S): MARPAT 62:91047

GI For diagram(s), see printed CA Issue.

AB The title compds. are prepared by treating (a) I (R = SMe) with an amine, (b) 2,2'-diaminobiphenyl (II) with a dialkylcarbodiimide, or (c) II with an alkylisothiourea. Thus, a solution of 31.5 g. I, (R = SH) (Le Fevre, CA 23, 3456) in 260 ml. tetrahydrofuran is stirred with 21 g. MeI 2 hrs., the mixture allowed to stand overnight, the solid collected and air dried to give 41 g. I (R = SMe, HI salt) (III), m. 233-5° (decomposition). Treating a CHCl<sub>3</sub> solution of III with 5% aqueous KOH yields the free base (IV), m. 165-6°. Treating a tetrahydrofuran solution of IV with dry HCl in EtOH affords the HCl salt (V), m. 223-4° (decomposition). A mixture of 3 g. IV and 2 g. N,N-diethyl-N'-methylethylenediamine is heated to 200° 3 hrs., the mixture cooled, mixed with 30 ml. H<sub>2</sub>O, the liquid decanted, the gum washed with 50 ml. MeOH, the solvent removed by distillation, the product converted to the dihydrochloride by treatment with 5N HCl in EtOH, and twice recrystd. from EtOH-iso-Pr<sub>2</sub>O to give 81% I, R = NMe(CH<sub>2</sub>)<sub>2</sub>NEt<sub>2</sub>, m. 249-50° (decomposition). Similarly is obtained from III 87% I (R = piperidino), m. 142-3°; and from V the dihydrochloride of I [R = (2-morpholinoethyl)amino], m. 279-80° (decomposition). A mixture of 9.2 g. II and 6.5 g.

N,N'-diisopropylcarbodiimide

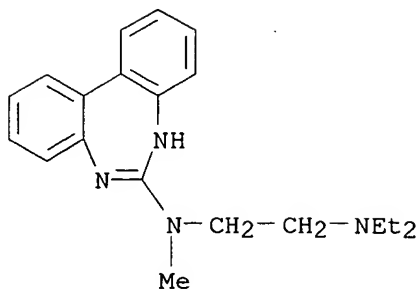
is heated to 150° (the reaction proceeds briskly at 170° with a strong amine evolution), the temperature held at 190-200° 0.5 hr., the melt allowed to cool, and recrystd. once from EtOH-EtOAc and once from iso-PrOH to give 80% I (R = NHPr-iso), m. 222.0-2.5°. Similarly are obtained 6-isopropylamino-3,9-dimethyl-5H-dibenzo[d,f][1,3]diazepine, m. 239-40°; I (R = cyclohexylamino), m. 231-2°. A mixture of 6 g. II and 6 g. S-methylpseudothiouthiourea sulfate is heated to 100°, the temperature gradually raised to 200°, and held there 0.5 hr., the gum cooled, collected, triturated with 200 ml. H<sub>2</sub>O and the insol. solid recrystd. from 35% EtOH to yield 36% I (R = NH<sub>2</sub>), m. 208-9° (decomposition). Similarly are obtained the following I (R, salt, m.p., given): hexamethylenimino, ethanol complex, 69-80° (decomposition); 4-methylpiperazino, di-HCl, >310°; NMe(CH<sub>2</sub>)<sub>2</sub>NMe<sub>2</sub>, di-HCl, 250-1°; NEt(CH<sub>2</sub>)<sub>2</sub>NEt<sub>2</sub>, di-HCl, 159-61°; NMe<sub>2</sub>, HCl, >310°; NEt<sub>2</sub>, HCl, >310°; NHMe, --, 243-5°; NHET, --, 213-15°; morpholino, HCl, >310°; pyrrolidino, HCl, >310°; 2-thiazolylamino, --, 204-5°; NHBu, HCl, 239-41°; anilino, --, 255-6°; NH(CH<sub>2</sub>)<sub>2</sub>NMe<sub>2</sub>, di-HCl, 219-21°; 6-(2-morpholinoethylamino)-3,9-dichloro-5H-



dibenzo[d,f][1,3]diazepine, --, 215.5-17.5°; carbethoxymethylamino, HCl, 193-4° (decomposition); NHOH, HCl, 225-6° (decomposition). (uv and ir data are tabulated). The compds. and the salts thereof with pharmaceutically acceptable acids possess antifungal, antibacterial, anticonvulsant, muscle relaxant, interneuronal depressant, and a variety of psychotropic effects.

- IT 2849-00-5, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]methylamino]-, dihydrochloride 2849-01-6, 5H-Dibenzo[d,f][1,3]diazepine, 6-piperidino- 2849-02-7, 5H-Dibenzo[d,f][1,3]diazepine, 6-(isopropylamino)-3,9-dimethyl- 2849-04-9, 5H-Dibenzo[d,f][1,3]diazepine, 6-(dimethylamino)-, hydrochloride 2849-05-0, 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylamino)- 2849-06-1, 5H-Dibenzo[d,f][1,3]diazepine, 6-(ethylamino)- 2849-07-2, 5H-Dibenzo[d,f][1,3]diazepine, 6-morpholino-, hydrochloride 2849-08-3, 5H-Dibenzo[d,f][1,3]diazepine, 6-(1-pyrrolidinyl)-, hydrochloride 2849-09-4, 5H-Dibenzo[d,f][1,3]diazepine, 6-(2-thiazolylamino)- 2849-31-2, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]amino]-, dihydrochloride 2849-32-3, 5H-Dibenzo[d,f][1,3]diazepine, 6-(butylamino)-, hydrochloride 2849-34-5, 5H-Dibenzo[d,f][1,3]diazepine, 3,9-dichloro-6-[[2-morpholinoethyl]amino]- 2849-35-6, 5H-Dibenzo[d,f][1,3]diazepine, 6-(hydroxyamino)-, hydrochloride 2870-28-2, 5H-Dibenzo[d,f][1,3]diazepine, 6-(hexahydro-1H-azepin-1-yl)-, compound with EtOH (1:1) 2880-29-7, 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)- 2880-30-0, 5H-Dibenzo[d,f][1,3]diazepine, 6-(isopropylamino)- 2880-31-1, 5H-Dibenzo[d,f][1,3]diazepine, 6-(cyclohexylamino)- 2880-32-2, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(dimethylamino)ethyl]methylamino]-, dihydrochloride 2880-33-3, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]ethylamino]-, dihydrochloride 2880-34-4, 5H-Dibenzo[d,f][1,3]diazepine, 6-(diethylamino)-, hydrochloride 2880-35-5, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(dimethylamino)ethyl]amino]-, dihydrochloride 2880-36-6, Glycine, N-5H-dibenzo[d,f][1,3]diazepin-6-yl-, ethyl ester, hydrochloride 2882-40-8, 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)-, hydriodide 3048-94-0, 5H-Dibenzo[d,f][1,3]diazepine, 6-(hexahydro-1H-azepin-1-yl)- 3048-97-3, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-morpholinoethyl]amino]-, dihydrochloride 3048-98-4, 5H-Dibenzo[d,f][1,3]diazepine, 6-(4-methyl-1-piperazinyl)-, dihydrochloride (preparation of)
- RN 2849-00-5 CAPLUS
- CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]methylamino]-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)

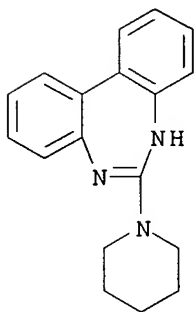
10/019,683



● 2 HCl

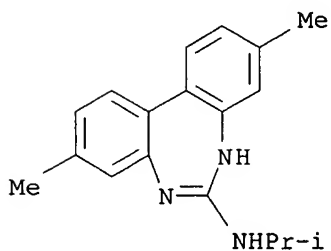
RN 2849-01-6 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(1-piperidiny)- (9CI) (CA INDEX NAME)



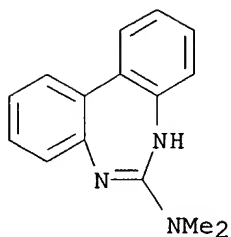
RN 2849-02-7 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(isopropylamino)-3,9-dimethyl- (7CI, 8CI)  
(CA INDEX NAME)



RN 2849-04-9 CAPLUS

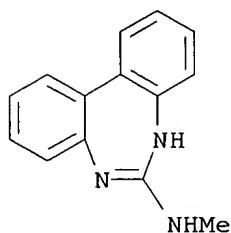
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(dimethylamino)-, monohydrochloride (8CI)  
(CA INDEX NAME)



● HCl

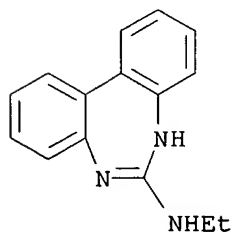
RN 2849-05-0 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepin-6-amine, N-methyl- (9CI) (CA INDEX NAME)



RN 2849-06-1 CAPLUS

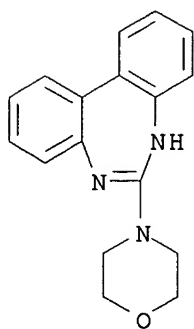
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(ethylamino)- (7CI, 8CI) (CA INDEX NAME)



RN 2849-07-2 CAPLUS

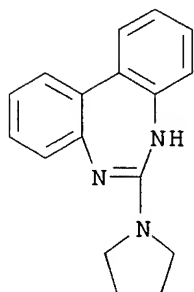
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-morpholino-, monohydrochloride (8CI) (CA INDEX NAME)

10/019,683



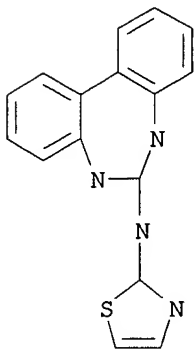
● HCl

RN 2849-08-3 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(1-pyrrolidinyl)-, monohydrochloride  
(8CI) (CA INDEX NAME)



● HCl

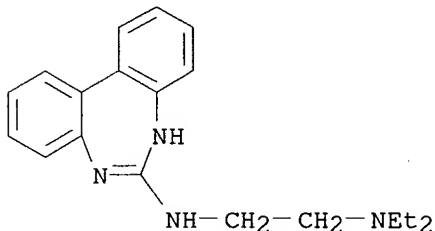
RN 2849-09-4 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepin-6-amine, N-(2-thiazolyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 2849-31-2 CAPLUS

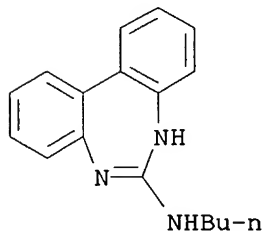
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[[[(diethylamino)ethyl]amino]-, dihydrochloride (8CI) (CA INDEX NAME)



● 2 HCl

RN 2849-32-3 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(butylamino)-, monohydrochloride (8CI) (CA INDEX NAME)

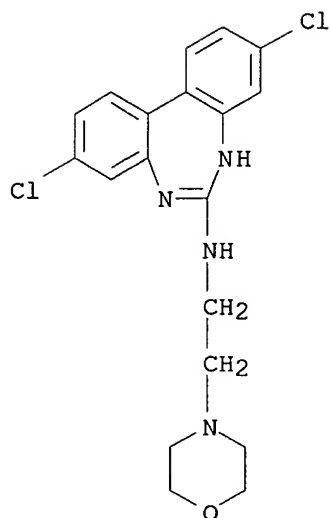


● HCl

RN 2849-34-5 CAPLUS

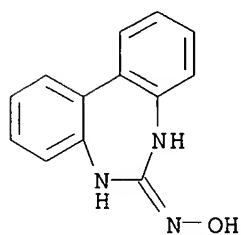
CN 5H-Dibenzo[d,f][1,3]diazepine, 3,9-dichloro-6-[(2-morpholinoethyl)amino]- (7CI, 8CI) (CA INDEX NAME)

10/019,683



RN 2849-35-6 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(hydroxyamino)-, monohydrochloride (8CI)  
(CA INDEX NAME)



● HCl

RN 2870-28-2 CAPLUS

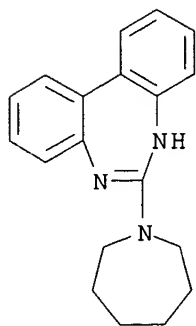
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(hexahydro-1H-azepin-1-yl)-, compd. with  
ethanol (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 3048-94-0

CMF C19 H21 N3

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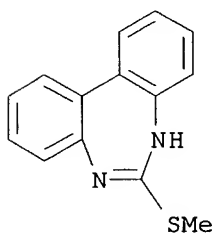


CM 2

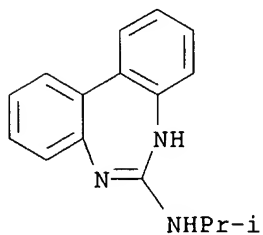
CRN 64-17-5  
CMF C2 H6 O

H<sub>3</sub>C-CH<sub>2</sub>-OH

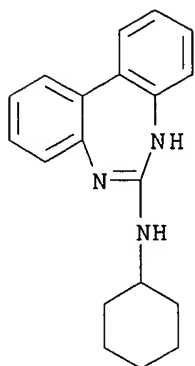
RN 2880-29-7 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)- (7CI, 8CI, 9CI) (CA INDEX NAME)



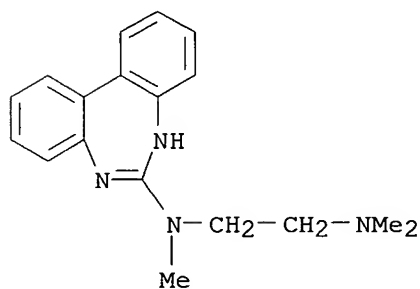
RN 2880-30-0 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(isopropylamino)- (7CI, 8CI) (CA INDEX NAME)



RN 2880-31-1 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(cyclohexylamino)- (7CI, 8CI) (CA INDEX NAME)

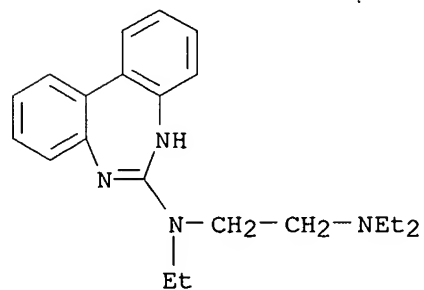


RN 2880-32-2 CAPLUS  
 CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(dimethylamino)ethyl]methylamino]-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



● 2 HCl

RN 2880-33-3 CAPLUS  
 CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]ethylamino]-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



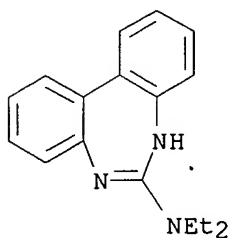
● 2 HCl



10/019,683

RN 2880-34-4 CAPLUS

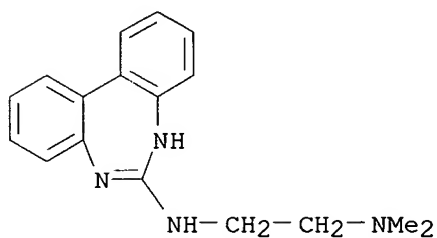
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(diethylamino)-, monohydrochloride (8CI)  
(CA INDEX NAME)



● HCl

RN 2880-35-5 CAPLUS

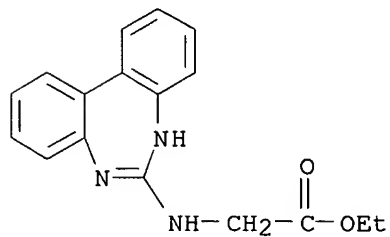
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(dimethylamino)ethyl]amino]-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



●2 HCl

RN 2880-36-6 CAPLUS

CN Glycine, N-5H-dibenzo[d,f][1,3]diazepin-6-yl-, ethyl ester, hydrochloride (7CI) (CA INDEX NAME)

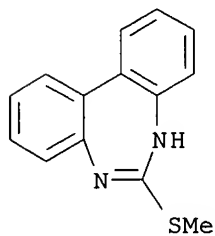


● HCl

RN 2882-40-8 CAPLUS

10/019,683

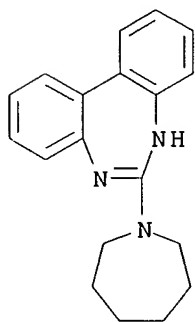
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)-, monohydriodide (8CI) (CA INDEX NAME)



● HI

RN 3048-94-0 CAPLUS

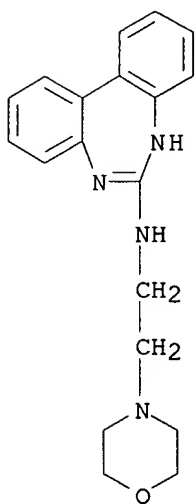
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(hexahydro-1H-azepin-1-yl)- (7CI, 8CI)  
(CA INDEX NAME)



RN 3048-97-3 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[(2-morpholinoethyl)amino]-, dihydrochloride (8CI) (CA INDEX NAME)

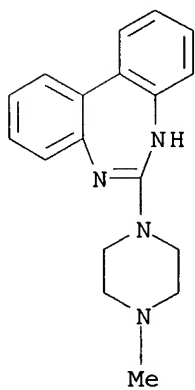
10/019,683



● 2 HCl

RN 3048-98-4 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(4-methyl-1-piperazinyl)-,  
dihydrochloride (7CI, 8CI) (CA INDEX NAME)



● 2 HCl

174 ANSWER 55 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1964:404231 CAPLUS

DOCUMENT NUMBER: 61:4231

ORIGINAL REFERENCE NO.: 61:662g-h

TITLE: 6-Amino derivatives of 5H-dibenzo[d,f] [1,3] diazepine

AUTHOR(S): Kreighbaum, W. E.; Scarborough, H. C.

CORPORATE SOURCE: Mead Johnson Res. Center, Evansville, IN

SOURCE: Journal of Medicinal Chemistry (1964), 7(3), 310-12

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

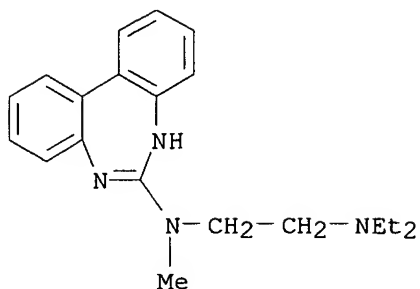
AB 6-Amino and 6-substituted-amino derivs. (I) of 5H-dibenzo[d,f]-[1,3]diazepine have been prepared by replacement of the corresponding alkylthio function or by ring closure of 2,2'-diaminobiphenyl with N,N'-dialkylcarbodiimides or S-methylthiourea.

IT 2849-00-5, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]methylamino]-, dihydrochloride 2849-01-6, 5H-Dibenzo[d,f][1,3]diazepine, 6-piperidino- 2849-04-9, 5H-Dibenzo[d,f][1,3]diazepine, 6-(dimethylamino)-, hydrochloride 2849-05-0, 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylamino)- 2849-06-1, 5H-Dibenzo[d,f][1,3]diazepine, 6-(ethylamino)- 2849-07-2, 5H-Dibenzo[d,f][1,3]diazepine, 6-morpholino-, hydrochloride 2849-08-3, 5H-Dibenzo[d,f][1,3]diazepine, 6-(1-pyrrolidinyl)-, hydrochloride 2849-09-4, 5H-Dibenzo[d,f][1,3]diazepine, 6-(2-thiazolylamino)- 2849-32-3, 5H-Dibenzo[d,f][1,3]diazepine, 6-(butylamino)-, hydrochloride 2849-35-6, 5H-Dibenzo[d,f][1,3]diazepine, 6-(hydroxyamino)-, hydrochloride 2880-29-7, 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)- 2880-30-0, 5H-Dibenzo[d,f][1,3]diazepine, 6-(isopropylamino)- 2880-31-1, 5H-Dibenzo[d,f][1,3]diazepine, 6-(cyclohexylamino)- 2880-32-2, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(dimethylamino)ethyl]methylamino]-, dihydrochloride 2880-33-3, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]ethylamino]-, dihydrochloride 2880-34-4, 5H-Dibenzo[d,f][1,3]diazepine, 6-(diethylamino)-, hydrochloride 2880-36-6, Glycine, N-5H-dibenzo[d,f][1,3]diazepin-6-yl-, ethyl ester, hydrochloride 2882-40-8, 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)-, hydriodide 3048-97-3, 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-morpholinoethyl]amino]-, dihydrochloride 3048-98-4, 5H-Dibenzo[d,f][1,3]diazepine, 6-(4-methyl-1-piperazinyl)-, dihydrochloride (preparation of)

RN 2849-00-5 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]methylamino]-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)

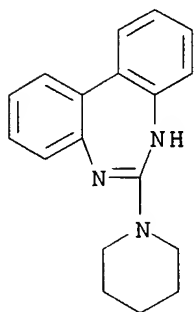
10/019,683



● 2 HCl

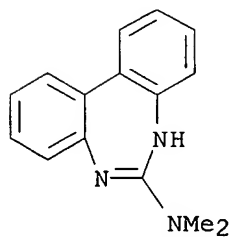
RN 2849-01-6 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(1-piperidiny)- (9CI) (CA INDEX NAME)



RN 2849-04-9 CAPLUS

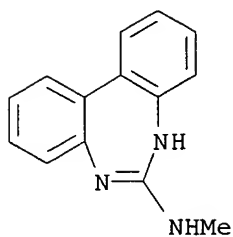
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(dimethylamino)-, monohydrochloride (8CI)  
(CA INDEX NAME)



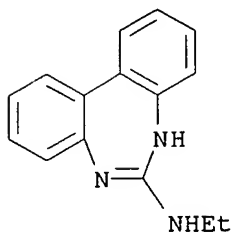
● HCl

RN 2849-05-0 CAPLUS

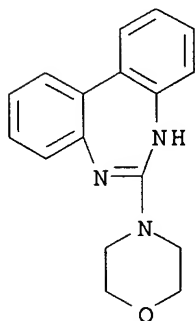
CN 5H-Dibenzo[d,f][1,3]diazepin-6-amine, N-methyl- (9CI) (CA INDEX NAME)



RN 2849-06-1 CAPLUS  
 CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(ethylamino)- (7CI, 8CI) (CA INDEX NAME)



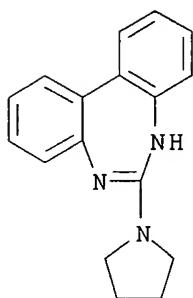
RN 2849-07-2 CAPLUS  
 CN 5H-Dibenzo[d,f][1,3]diazepine, 6-morpholino-, monohydrochloride (8CI) (CA INDEX NAME)



● HCl

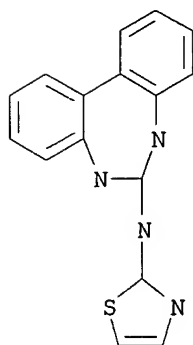
RN 2849-08-3 CAPLUS  
 CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(1-pyrrolidinyl)-, monohydrochloride (8CI) (CA INDEX NAME)

10/019,683

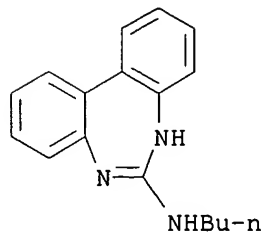


● HCl

RN 2849-09-4 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepin-6-amine, N-(2-thiazolyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
RN 2849-32-3 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(butylamino)-, monohydrochloride (8CI) (CA INDEX NAME)

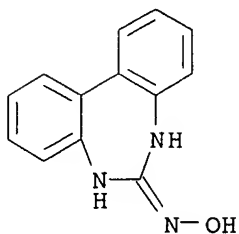


● HCl

RN 2849-35-6 CAPLUS

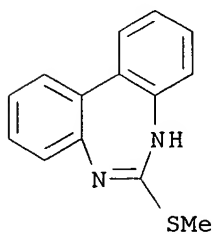
10/019,683

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(hydroxyamino)-, monohydrochloride (8CI)  
(CA INDEX NAME)

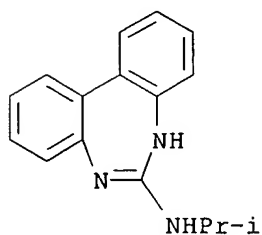


● HCl

RN 2880-29-7 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)- (7CI, 8CI, 9CI) (CA INDEX NAME)

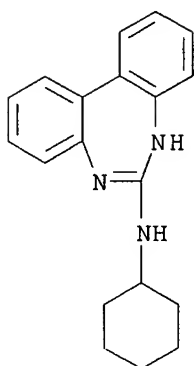


RN 2880-30-0 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(isopropylamino)- (7CI, 8CI) (CA INDEX NAME)

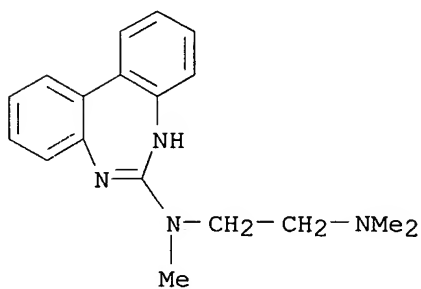


RN 2880-31-1 CAPLUS  
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(cyclohexylamino)- (7CI, 8CI) (CA INDEX NAME)



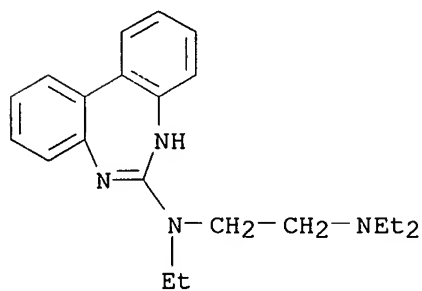


RN 2880-32-2 CAPLUS  
 CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(dimethylamino)ethyl]methylamino]-,  
 dihydrochloride (7CI, 8CI) (CA INDEX NAME)



● 2 HCl

RN 2880-33-3 CAPLUS  
 CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[[2-(diethylamino)ethyl]ethylamino]-,  
 dihydrochloride (7CI, 8CI) (CA INDEX NAME)

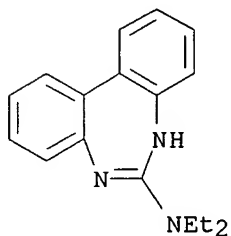


● 2 HCl

10/019,683

RN 2880-34-4 CAPLUS

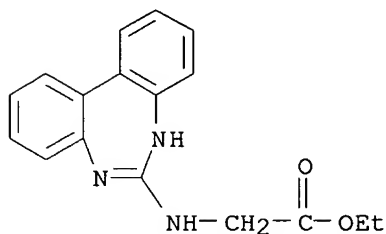
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(diethylamino)-, monohydrochloride (8CI)  
(CA INDEX NAME)



● HCl

RN 2880-36-6 CAPLUS

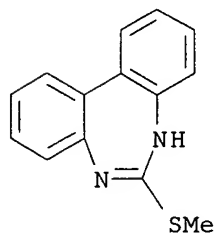
CN Glycine, N-5H-dibenzo[d,f][1,3]diazepin-6-yl-, ethyl ester, hydrochloride  
(7CI) (CA INDEX NAME)



● HCl

RN 2882-40-8 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(methylthio)-, monohydriodide (8CI) (CA  
INDEX NAME)

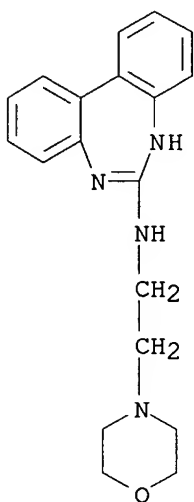


● HI

RN 3048-97-3 CAPLUS

10/019,683

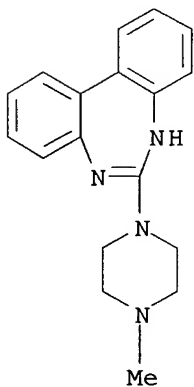
CN 5H-Dibenzo[d,f][1,3]diazepine, 6-[(2-morpholinoethyl)amino]-,  
dihydrochloride (8CI) (CA INDEX NAME)



● 2 HCl

RN 3048-98-4 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-(4-methyl-1-piperazinyl)-,  
dihydrochloride (7CI, 8CI) (CA INDEX NAME)



● 2 HCl

~~LA~~ ANSWER 56 OF 56 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1962:73508 CAPLUS

DOCUMENT NUMBER: 56:73508

ORIGINAL REFERENCE NO.: 56:14297e-i,14298a-i,14299a-c

TITLE: Heterocyclic seven-membered ring systems. XI. Ring closure reactions with o,o'-diaminobiphenyl

AUTHOR(S): Ried, Walter; Storbeck, Werner

CORPORATE SOURCE: Univ. Frankfurt, Germany

SOURCE: Chemische Berichte (1962), 95, 459-72

CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 56:73508

GI For diagram(s), see printed CA Issue.

AB cf. CA 54, 5687i. The reaction of (o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>)<sub>2</sub> (I) with carboxylic acids, AcCH<sub>2</sub>CO<sub>2</sub>Et (II), and ortho esters, and the thermal condensation of mono-Ac derivs. of I are described. I (1.85 g.) and 5 cc. 80% DL-lactic acid heated 5 hrs. on the steam bath, heated slowly during 6 hrs. to 130° pot temperature, cooled, and diluted with 30 cc. H<sub>2</sub>O yielded 1.4 g. [o-MeCH(OH)CONHC<sub>6</sub>H<sub>4</sub>]<sub>2</sub>, m. 218.5° (EtOAc). I (9.25 g.) treated with 6.50 g. (CO<sub>2</sub>H)<sub>2</sub>.2H<sub>2</sub>O in 5 cc. hot H<sub>2</sub>O, heated 30 min. at 100°, washed with 150 cc. H<sub>2</sub>O, and boiled twice with 100-cc. portions MeOH gave 6.0 g. 6,7-dioxo-5,6,7,8-tetrahydrodibenzo[e,g] [1.4]diazocin, m. 186° (decomposition); a similar run with 10 g. (CO<sub>2</sub>H)<sub>2</sub>.2H<sub>2</sub>O gave 9.2 g. product. I (1.85 g.) in 20 cc. o-C<sub>6</sub>H<sub>4</sub>Cl<sub>2</sub> treated with 1.85 g. o-sulfobenzoic acid anhydride in 15 cc. o-C<sub>6</sub>H<sub>4</sub>Cl<sub>2</sub>, heated 1 hr. at 220° and filtered gave 3.7 g. 6-(o-sulfophenyl)-5H-dibenzo[d,f] [1.3]diazepine, yellow prisms, m. 399° (MeOH). I (1.85 g.), 1.30 g. II, and 5 cc. C<sub>6</sub>H<sub>6</sub> refluxed 5 hrs. and evaporated, the residue heated 10 hrs. at 180-200°, and the residual resin (2.6 g.) treated with hot MeOH and filtered gave 0.88 g. insol. 6-oxo-6,7-dihydro-dibenzo[d,f] [1.3]diazepine (III), needles, m. 311-13° with sublimation (AcOH). I (5.55 g.) in 30 cc. C<sub>5</sub>H<sub>5</sub>N refluxed 24 hrs. with 3.90 g. II and 10 drops piperidine on the steam bath and evaporated, the residue treated with two 50-cc. portions Et<sub>2</sub>O, and the insol. material (1.0 g.) recrystd. from AcOH gave 0.3 g. III; the Et<sub>2</sub>O solution gave after 48 hrs. 0.08 g. impure III; the Et<sub>2</sub>O. solution washed, dried, and evaporated, the resinous residue treated with 100 cc. Et<sub>2</sub>O, and the insol. material treated with cold H<sub>2</sub>O gave 0.45 g. N-AcCH<sub>2</sub>CO derivative of I, m. 93° (decomposition). o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>C<sub>6</sub>H<sub>4</sub>NHCHO-o (9.7 g.), m. 132°, in 300 cc. 96% EtOH treated with 11 g. amalgamated Al rings, refluxed. 7 hrs. on the steam bath while being treated after 0.5 and 4 hrs. with 6-cc. portions H<sub>2</sub>O, kept overnight, diluted with 200 cc. MeOH, heated to 70°, and filtered, and the filtrate evaporated gave 5.8 g. resinous N-CHO derivative

(IV) of I. IV (1.07 g.), 0.75 g. tartaric acid, and 1 cc. H<sub>2</sub>O heated briefly gave 1.45 g. hydrogen tartrate of IV, yellow needles, m. 125° (MeOH). o-O<sub>2</sub>N C<sub>6</sub>H<sub>4</sub>C<sub>6</sub>H<sub>4</sub>NHAc (10.25 g.), m. 160°, reduced in the same manner yielded 8.5 g. pale yellow, resinous N-Ac derivative (V) of I. V (0.23 g.) and 0.23 g. picric acid refluxed in 25 cc. dry C<sub>6</sub>H<sub>6</sub> and kept 48 hrs. gave 0.35 g. picrate, m. 239°. Resinous o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>C<sub>6</sub>H<sub>4</sub>NHCOEt-o (10.8 g.) reduced in the usual manner gave 9.2 g. resinous o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>C<sub>6</sub>H<sub>4</sub>NHCOEt; a 0.24-g. portion in 5 cc. dry C<sub>6</sub>H<sub>6</sub> refluxed with 0.23 g. picric acid in 5 cc. dry C<sub>6</sub>H<sub>6</sub>, diluted with 10 cc. dry C<sub>6</sub>H<sub>6</sub>, heated again to boiling, and filtered after 24 hrs. gave 0.2 g. picrate, m. 227-9° (decomposition). IV (7.8 g.) heated 24 hrs. at 225°, cooled, and powdered, and the crude product (2.2 g.) heated with 20 cc. and washed with 10 cc. MeOH gave 1.0 g. insol. material, the filtrate and

washing evaporated gave 0.6 g. yellow resinous 5H-dibenzo[d,f][1.3]diazepine (VI). VI (0.2 g.) and 0.23 g. picric acid in 2 cc. EtOH gave 0.2 g. picrate, m. 233° (MeOH). VI (0.45 g.) in 6 cc. absolute EtOH treated with 0.38 g. tartaric acid in 3.5 cc. absolute EtOH, kept 24 hrs., and filtered yielded the tartrate of VI, pale yellow microcrystals, m. 175° (decomposition) (MeOH), m. 185° (dried 48 hrs. at 50°/12 mm. over P2O5). The MeOH-insol. material (1 g.) dissolved in 120 cc. dry C6H6 and filtered through Al2O3, and the filtrate evaporated gave 0.40 g. VII (R = H) (VIII), yellow needles, m. 282-4°. A similar run with 25g. IV gave similarly 2.6 g. VIII. V (8.5 g.) heated 26 hrs. at 225° yielded in the usual manner 2.05 g. VII (R = Me), yellow needles, m. 285-7°. (o-HCONHC6H4)2 (1.2 g.), m. 137°, heated 0.5 hr. at 260-80°, dissolved in 3 cc. 96% EtOH, and filtered, and the residue washed and dried gave 0.05 g. VIII, yellow needles, m. 270°. VIII (0.388 g.) refluxed 11 hrs. with 15 cc. 96% EtOH and 15 cc. concentrated HCl, filtered, and evaporated, and the residue dissolved in 5 cc. H2O, filtered, and treated with 0.5 cc. concentrated NH4OH gave 0.28 g. I, m. 79°; oxalate decomposed 148°. VIII (0.194 g.), 50 cc. AcOH, and 10 cc. C6H6 refluxed, cooled, and treated at 24hr. intervals with 1-g. portions solid NaNO2, filtered, and concentrated to 5 cc. deposited 0.12 g. dinitroso derivative dihydrate, m. 134°, which refluxed 32 hrs. with NaOEt-EtOH gave a yellow, infusible Na derivative; no reaction occurred when heated 32 hrs. in HC(OEt)3 (X). The thermal condensation of N-EtCO derivative (11 g.) of I gave 2.9 g. crude VII (R = Et), which filtered through Al2O3 yielded because of strong adsorption only 4 mg. light yellow crystals, m. 276°. I (1.85 g.) and 8 mole equivs. X heated 48 hrs. at 160°, filtered from a high-melting by-product (XI), and evaporated, and the residue dissolved in 12 cc. absolute EtOH with warming and cooled gave 92.7% resinous 6,7-dihydro-6-ethoxy-5H-dibenzo[d,f][1.3]diazepine (XII); the filtrate heated repeatedly to boiling with 2.3 g. picric acid in 12 cc. absolute EtOH gave the picrate of 5H-dibenzo[d,f][1.3]diazepine (XIII), m. 235° (MeOH); XIII.HCl decomposed at 250°; XIII.H3PO4 m. 247° (40% MeOH); XIII hydrogen tartrate m. 186°. A series of runs was prepared in a similar manner (mole ratio X:I, temperature, reaction time in hrs., and % yield of XII given): 8:1, 160°, 24, 82.7; 4:1, 160°, 12, 73.6; 4:1, 20°, 144, 11.8. I and 4 mole equivs. MeC(OEt)3 (XIV) heated 12 hrs. at 150°, evaporated at 190°/17 mm., dissolved in 10 cc. hot C6H6, filtered, and cooled gave 33.6% 6-Me derivative (XV) of XIII, needles, m. 168° (C6H6); XV.H3PO4 m. 285° (decomposition). A similar run during 24 hrs. yielded 24.0% XV and during 144 hrs. at 120° 81.7% XV. I and 2 mole equivs. XIV heated 12 hrs. at 150° gave 51.0% XV. I (0.01 mole) and 0.011 mole XIV in 20 cc. C6H6 heated 12 hrs. at 120° and treated with 1 drop concentrated HCl gave 1.35 g. XV; without HCl in 2 cc. C6H6 at 140° 1.8 g. XV was obtained. XV.HCl was hygroscopic and melted between 80 and 229° (decomposition), depending on the H2O content. XV (4 g.) in 50 cc. 96% EtOH treated with 2.6 g. 85% H3PO4 in 10 cc. 96% EtOH yielded 5.3 g. I.H3PO4, pale yellow platelets, m. 285° (decomposition) (50% aqueous MeOH). EtC(OEt)3 (XVI) (4 equivs.) and I heated 24 hrs. at 180° yielded 24.7% 6-Et derivative (XVII) of XIII, pale yellow needles, m. 232° (C6H6). A similar run at 160° yielded 22.5% XVII. XVII (0.1 g.) in 60 cc. dry Et2O treated with HCl-Et2O gave 0.095 g. XVII.-HCl, m. 204-6°. C(OEt)4 and 0.25 mole equivalent I heated 12 hrs. at 160° gave in 2 identical runs 18.9 and 21.0%, resp., 6-EtO derivative, needles, m. 135° (EtOH); a 0.1-g. portion in 30 cc. dry. Et2O treated with 0.3 cc. concentrated HCl gave the HCl salt, m. 329°; after

drying 48 hrs. at 50°/12 mm., m. 325°. PhC(OEt)<sub>3</sub> and 0.25 mole equivalent I heated 24 hrs. at 160° and evaporated, and the distillation residue crystallized from 15 cc. C<sub>6</sub>H<sub>6</sub> gave 58.1% 6-Ph derivative (XVIII) of XIII,

needles, m. 167° (C<sub>6</sub>H<sub>6</sub>); XVIII (0.1 g.) in 30 cc. dry Et<sub>2</sub>O gave 0.11 g. XVIII.HCl, m. 338°. A series of similar runs was performed with a mole ratio of ester to I of 4:1 (reaction temperature, reaction time, and

% yield of XVIII given): 220°, 18 hrs., 46.3; 220°, 12 hrs., 48.1; 20°, 37 days, 85.1. I (5.55g.) and 19.5 cc. X refluxed 24 hrs. at 140°, filtered from some XII, and evaporated, and the residue (4.9 g.) refluxed with 200 cc. absolute EtOH and filtered gave 3.7 g. XII which dissolved in 25 cc. C<sub>6</sub>H<sub>6</sub> and diluted with 100 cc. hexane gave 1.3 g. pure XII, m. 164°. XII (0.72 g.) in 3.2 cc. X refluxed 8 hrs. at 160°, filtered, and distilled, and the distillation residue dissolved in 5 cc. absolute EtOH, treated with 0.69 g. picric acid in 7 cc. absolute EtOH, heated

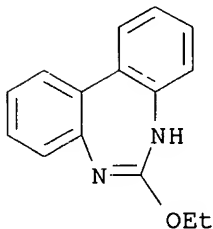
2 min., and cooled gave 0.80 g. picrate of XIII, m. 235°. XI (0.388 g.), m. 303°, treated 11 hrs. at 350° with HCl gave 0.25 g. I. XI (0.4 g.) recrystd. from 50 cc. C<sub>5</sub>H<sub>5</sub>N gave after 1 month 0.1 g. pure material. The infrared absorption spectra of IX and XV are recorded.

IT 98283-87-5, 5H-Dibenzo[d,f][1,3]diazepine, 6-ethoxy-, hydrochloride 98283-88-6, 5H-Dibenzo[d,f][1,3]diazepine, 6-ethoxy-

(preparation of)

RN 98283-87-5 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-ethoxy-, hydrochloride (7CI) (CA INDEX NAME)



● HCl

RN 98283-88-6 CAPLUS

CN 5H-Dibenzo[d,f][1,3]diazepine, 6-ethoxy- (7CI) (CA INDEX NAME)

